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LA VENTA, TABASCO
A STUDY OF OLMEC CERAMICS AND ART

By PHILIP DRUCKER

With a Chapter on
Structural Investigations in 1943
By Waldo R. Wedel
and Appendix on Technological Analyses
By Anna O. Shepard

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LETTER OF TRANSMITTAL

Smithsonian Institution,
Bureau of American Ethnology,
Washington, D. C., May 1, 1951.

Sir: I have the honor to transmit herewith a manuscript entitled "La Venta, Tabasco: A Study of Olmec Ceramics and Art," by Philip Drucker, with a chapter on "Structural Investigations in 1943," by Waldo R. Wedel, and an Appendix on "Technological Analysis," by Anna O. Shepard, and to recommend that it be published as a bulletin of the Bureau of American Ethnology.

Very respectfully yours,

M. W. Stirling, *Director.*

Dr. Alexander Wetmore,
Secretary, Smithsonian Institution.

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FOREWORD

This report on two brief seasons of excavations at La Venta seems to have been doomed from the outset to the hopper of the sort of mill that, whether or not it grinds fine, certainly grinds exceeding slow. This was unfortunate, for when the field work was being done, there was considerable interest in the Olmec problem, and a more timely appearance of the report would have been desirable. However, the attack on Pearl Harbor, which interrupted many crucial things, reduced the first season's program drastically, and then separated me from field notes and sherd and jade collections for some 3 years. After the war, in between other tasks, I was able to work on the report. Finally it was nearly done, and I found myself about to go back on active duty. Just 3 years ago, I hastily checked through the rough manuscript, with a thick sheaf of notes and sketches about the illustrations and figures, and dumped the whole hodgepodge into the hands of the Bureau of American Ethnology's editor, Miss M. Helen Palmer. While I luxuriated on Micronesia's coral strands and blue lagoons, Miss Palmer pulled the report together. I am offering her my thanks here. The readers of this report should thank her, too, for giving it such readability as it may have, and for editing out my grammatical lapses. The reader and I owe her thanks also for seeing the art work through, a particularly rugged chore when the author is as out of reach as I was.

Drs. Shepard and Wedel have made signal contributions to the present report, and I am indebted to them. It will be the reader's responsibility, however, to integrate the results of their sections with those I wrote, for I have seen their final versions only in the galley proofs, which made it too late for me to make any major revisions. The report will be improved if the conclusions of Miss Shepard's "Appendix" and Wedel's chapter are tied in with the rest, but the reader will have to undertake that task, blaming me and not my colleagues for the added burden.

It is also a matter of some embarrassment that I have not been able to take into account the various major contributions to our knowledge of Mesoamerican prehistory that have appeared in the 3 years since I submitted the manuscript. The results of such studies as Smith's Uaxactun report, Miss Proskouriakoff's analysis of Mayan sculpture, and Garcia Payón's researches in the archeology of central Veracruz, to mention a few of the outstanding reports appearing since 1948, all bear in one way or another on the Olmec problem, and at some points appear to substantiate parts of my arguments and at others seem to be in sharp conflict with them. Ideally, these recent publications should be considered in the present study, whether doing so involved extensive changes or not. As a practical matter, such additions or changes cannot be made at this point. The present report therefore requires an added indulgence on the part of the reader: it must be read as of October 1948, and in the light of the comparative data on Mesoamerican prehistory then current.

Philip Drucker,
Lieutenant Commander, USNR.

October 1951.

LA VENTA, TABASCO
A STUDY OF OLMEC CERAMICS AND ART

By Philip Drucker

INTRODUCTION

The present paper has a twofold aim. The first is to describe the excavations of the Smithsonian Institution-National Geographic archeological expeditions at La Venta, in western Tabasco, México, in 1942 and 1943, and to analyze the ceramic materials collected; the second is to describe and analyze a series of art objects from the same site with the object of defining the art style they represent. The work in 1942 was carried out by the writer. Most of the excavations that season consisted of test-pits to locate refuse beds containing pottery, and stratigraphic trenches to collect adequate samples of the local wares for placing the site chronologically in relation to other Mesoamerican cultures. Some exploration of structures was done at the end of the season, and at that time an important series of carvings of jade and other materials was found. In 1943 Drs. Stirling and Wedel carried out excavations, chiefly of structural features of the site, and added considerably to the series of art objects as well as assembling important data on the constructions. Wedel is describing that phase of the work in a separate chapter. He and Stirling have both made notes and other materials available to me for the study of the pottery and of the art objects; Stirling has added other materials from his survey of sites throughout the state of Tabasco and southern Veracruz. However, for errors of treatment and of interpretation of this material only the present writer is to be blamed. The National Geographic Society in addition to sponsoring the field work has very liberally supplied me with prints from their official expedition photographic files, made by the expedition photographer, Mr. Richard Stewart.

The investigations at La Venta were a part of Stirling's program of attack on the problem of Mesoamerican culture growth outside the area known to have been inhabited by Mayan peoples. During Stirling's reconnaissance of La Venta in 1940 he discovered a considerable number of stone monuments there, and judged it to have been a ceremonial center of major importance (Stirling, 1943). He chose the site for excavation for the 1942 season, planning a large-scale investigation. The program had to be curtailed because of the outbreak of the war, but was carried out by the writer for a 3-month season, with a small crew. Just before the opening of the Round Table Conference at Tuxtla Gutiérrez, Chiapas, on the Olmec problem, Stirling was able to visit the site briefly, very fortunately, just as certain interesting structural features in Complex A were being uncovered: a peculiar tomb made of basalt columns, and a great carved cofferlike affair of sandstone. He took charge of the excavation of the contents of these features, which proved to contain some interesting jade objects, and which he described at the Tuxtla Conference and in a popular article as well.[1] In 1943, the results of the brief investigations of Complex A was followed up by a full season's work with a good-sized crew, directed, as has been remarked, by Stirling and Wedel.

The fact of the matter is that even at the end of the 1943 season the site of La Venta was a long way from being completely excavated. The structures are large and complex, and several seasons of intensive excavation should still be carried on—we hope that it may be possible to return to the site some time in the future. For that reason the sections of this report describing the results of work in the structures are to be regarded as preliminary. We have at best only a fragmentary notion of the nature of the Ceremonial Court, and its untested portions undoubtedly contain numerous features—and if those that have been found are a fair sample they will probably include some strange and completely unsuspected types. We are better off, however, in regard to the ceramics and the sculptures, for both series are large enough so that we may derive decisive conclusions from them.

The Round Table Conference on the Olmec question arrived at certain conclusions which can be checked with the present material, and also formulated a series of problems which must be dealt with in this report. The temporal placing of the culture can be treated through a study of the pottery, an approach that has not been possible previously. Study of the sculptures, large and small, shows that the site of La Venta was a center of typical and pure Olmec art in its highest form. From the series of sculptures, it should be possible to define the distinctive features of the art style with considerable precision.

In this account, as in a previous brief discussion of some aspects of the ceramics (Drucker, 1947), I have seized the bull by the horns, or perhaps I should say the wildcat by the tail, and have used the term

---

[1] Soc. Mexicana de Antropologia, Mayas y Olmecas. Segunda Reunión do Mesa Redonda, Tuxtla Gutiérrez, Chiapas, 1942. (Cited hereafter as "Mayas y Olmecas"); Stirling and Stirling, 1942.

"Olmec" to refer to the culture of which La Venta is one manifestation. This usage, contrary to that worked out at the Round Table Conference, is based on the following grounds. First of all, the terms "La Venta," recommended by the Conference as a name for the culture, is awkward, because the site of La Venta proved to represent a single horizon or period of a cultural sequence determined at the neighboring site of Tres Zapotes. It seems preferable to limit the use of the term La Venta to that particular period. Second, as Covarrubias and others have pointed out, the term "Olmec" has been applied to objects made in the distinctive art style for long enough to have some familiarity, and its extension to other aspects of culture associated with that art style is convenient. Third, as Jimenez Moreno's painstaking ethnohistoric studies have brought out, the term Olmec actually has no stable ethnic significance, but seems to have been applied to various groups at different times.

For these reasons I have used the name for the archeological culture as a whole. It carries here none of the ethnic implications of Jimenez Moreno's Paleo-Olmec, Proto-Olmec, and the rest. We have no shred of evidence as to the linguistic affiliation of the people who constructed the mounds, made the pottery, and carved the monuments and jades in the southern Veracruz-western Tabasco region. At the present time the native Indian population includes a variety of dialects, some said to be related to Mixe, others to Zoque, as well as a number of communities in which a variety of Nahua is spoken. Presumably the last-mentioned people had nothing to do with the Olmec archeological remains, but whether or not the ancestors of one or the other of the Mixe- and Zoque-speaking populations had is a complete mystery. We desperately need investigations working back from identifiable historic sites if we are ever to identify the bearers of Olmec culture, and even then it may not be possible, except by a process of elimination, for the principal strain of Olmec culture seems to have faded out of existence about the tenth century of our era.

PART I: EXCAVATIONS AND ARTIFACTS

THE SITE OF LA VENTA

Geographical setting.—The archeological site of La Venta is situated on the low coastal plain of western Tabasco, ten or a dozen miles inland, between systems of streams and sloughs draining into the Rio Tonalá. The terrain in this region is predominantly swamp, next to impassable to foot travelers. Mangrove swamps line the riverbanks for many miles inland, indicating the reach of the low Gulf tides in the flat plain. Here and there are elevated areas, varying from a few square feet to a good number of acres in extent. It is such places that are occupied at the present day, and were selected for habitation in ancient times as well.

The traveler in the region cannot but be impressed by the sudden change from the rolling red earth hills of Minatitlán which are a gradually descending extension of the foothills of the Tuxtla Mountains, and the high sand dunes around Puerto México (Coatzacoalcos), to the flat swamp plain, just barely above sea level, that extends for miles to the eastward, along the coast. This whole swamp zone must have been formerly open sea—a great bay that gradually silted in. Oil geologists working in the La Venta zone have told me that testing and drilling operations show a layer of almost a hundred feet of swamp muck extending downward from the present surface, with, here and there, beds of marine or brackish-water shells. Potsherds and fragments of figurines often come from considerable depths in this muck. We can be certain that these objects do not represent ancient horizons buried by modern swamp, but are undoubtedly things lost overboard from canoes at a time when there was more open water than at the present day.

The best account of the regional geography available is that of Krynine (1935). His account is worth quoting in extenso:

> The region under discussion lies along the coast of the Gulf of Campeche . . . It comprises the western part of the state of Tabasco and small adjoining parts of the state of Veracruz and Chiapas, Mexico.
>
> The climate is tropical with an exceedingly heavy rainfall. The mean annual temperature is 80° F. (25°–26° C.). The rainfall differs in the four geomorphic provinces of the region. On the coast it fluctuates between 100 and 120 inches, and in the mountains it reaches 250 and even 300 inches per year.
>
> [In a set of tables, Krynine gives the following data from a station (Puerto México) in the Coast Plain geomorphic province: Mean yearly temperature:

25° C.; annual rainfall: 2,914 mm.; dry season rainfall: 151 mm.; climatic type (Köppen): Amw".]

There is a marked dry season in April and May, when there is no rain whatever. Occasional storms take place in March, June, July and August. The heavy rains are concentrated between September and February.

Geologically the region belongs to Central rather than to North America.

Deposition was active during Tertiary time and over 12,000 feet of sedimentary rocks were formed during that period. They are mostly sandstones and shales with subordinate limestones and locally thick and well-indurated conglomerates. Feldspathic and micaceous material is abundant throughout the series. Some of the Miocene horizons can definitely be classified as arkoses.

The topography of the region reflects the two major structural movements which have taken place since the end of the Pliocene period. The main post-Pliocene orogenesis created the mountain front and the foothills and shaped the broad geomorphic features of the country.

After erosion in the southern mountains and deposition in the northern plains had been in progress, a rotational tilting movement elevated the eastern part of the basin of deposition and subjected it to renewed erosion. At the same time the western part of the basin was depressed and here sedimentation kept on progressing.

As a result we have in the northern and northwestern parts of the region, first, a swampy alluvial plain, and then, further inland, a flat savanna. Both are covered with a thick mantle of Pleistocene and recent alluvium. In the central and southeastern parts, this alluvial mantle is being subjected to erosion and forms a hilly topography of moderate relief. Further south, the country consists of rugged hills made of Tertiary rocks which gradually pass into the high mountains of the Sierra Central of Chiapas. In accordance with this, the area can be divided into the four geomorphic provinces described below.

The Low Coastal Plain: The shoreline of western Tabasco is essentially a shoreline of emergence, partly modified by later submergence. Between Tonalá and Santa Ana a line of sand dunes skirts the straight and monotonous sandy beach, and extending for a distance of two to four kilometers inland it rises to elevations up to 50 feet. As a result of coastal emergence the dune belt has been gradually widened and the older dunes, once left behind, have been immediately seized and fixated by a luxuriant vegetation.

Reed marshes flank the jungle-covered sand-dune belt. The jungle again gains a foothold on the higher ground formed by the natural levees along the margins of inland streams and arroyos which drain these swamps. To the south the marshes give way to large areas of jungle-covered flats, the real mainland. The monotony of the northern part of the coastal plain is interrupted by a few isolated low hills which appear as remnants of an older topography buried by recent alluvium." [Krynine, 1935, pp. 354 ff.]

These buried hills, of which La Venta is one, belong of course to geologic formations antedating the submergence and swamp formation in western Tabasco. The La Venta structure, and apparently the larger "island" at the oil camp of Agua Dulce, not far away, and probably all the "hills" of the vicinity, consist of bases of well-indurated yellowish-brown sandstones capped by a bed of heavy clay developed from the sedimentary formation. The soil formation is very uniform: The upper horizon, except for a few inches at the surface stained by dark brown humus materials, is an intense brick–

red color; its lower margin is mottled, passing into the lower (apparently the eluvial) horizon of a clay similar in texture but of a light creamy-yellow color which lies directly on the parent rock. In the absence of a chemical analysis, it is impossible to describe the soil structure properly, but it appears to be a clay formation developing toward laterite. The most significant fact for the present, however, is that both soil and parent rock so closely duplicate the characteristic formation of the Tuxtla region as to make it almost certain that La Venta and other islands in the swamp are outliers of the (prevolcanic) eroded Miocene peneplain of the Tuxtlas. A striking fact is that this structure has not been encountered, or so I was informed, in the drilling operations a scant half mile from the edge of firm ground at La Venta. The island must therefore have been eroded out into a high and very steep-sided block, prior to the submergence, to which Krynine refers, of the western end of the basin. The soil formation is complicated by the occurrence of sandy deposits of two types: One, the arkose beds described by Krynine, which apparently filled in old drainage channels prior to the recent emergence of the region;[2] the other, windblown sand and light soil which in some places assumes a dunelike structure. The cultural remains at La Venta are for the most part associated with this last-named formation, lying in and sometimes being covered by the windblown sandy soil.

The island of La Venta is between 6 and 7 kilometers long, running more or less north and south (fig. 1). Width varies considerably for a series of long narrow peninsulas run out into the swamps on either side, but the main body of the island is about a kilometer and a half across, with a maximum width of probably 4 kilometers. The maximum height of the present-day soil surface is somewhere between 10 and 12 meters, save for the sizable hill, "Cerro de San Cristobal," on the west central edge. The northern and western borders are higher and more abrupt; on the other sides the firm ground merges almost imperceptibly into the swamp. The three outcrops of country rock noted are all on or near the west edge of the island, suggesting a moderately strong dip of the basic formation. From some distance off, the island appears as a dark green elevation easily distinguishable above the yellowish and pale greens of the swamp vegetation. The present surface is quite irregular, cut by numerous ephemeral stream courses, and frequently with grown-over dune formations augmenting the height of the clay knolls and ridges.

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[2] Krynine, 1935. La Venta, frequently explored by oil-seekers in the last two or three decades, is probably the locality discussed by this author, although his regional map, perhaps due to its small scale, seems to show the arkose beds about halfway between La Venta and the Coast.

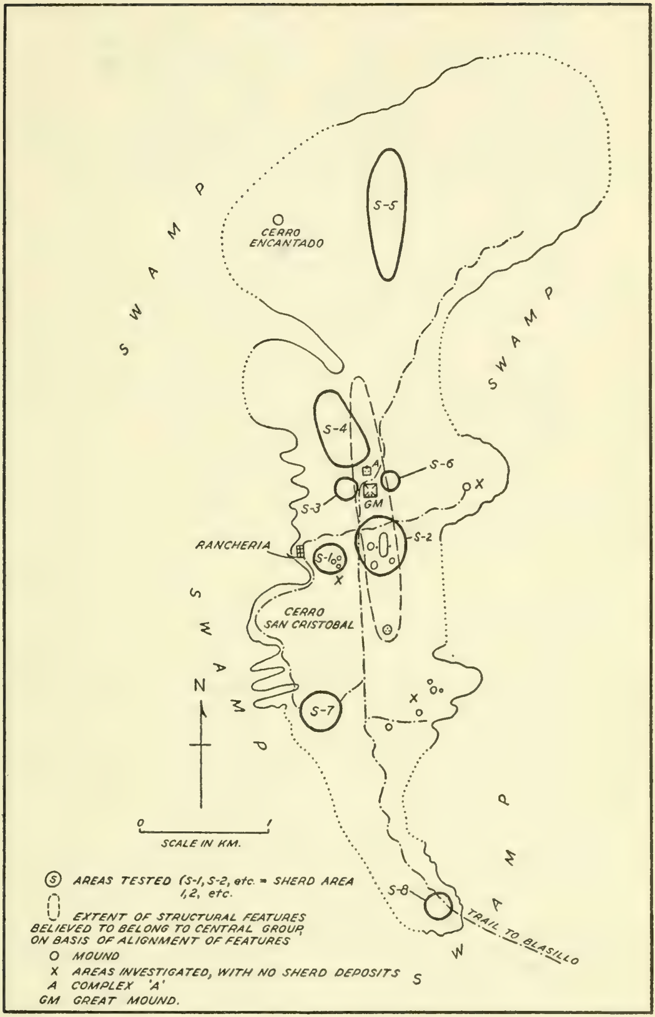
SWAMP
CERRO ENCANTADO
S-5
SWAMP
S-4
A
S-6
S-3
GM
X
S-2
RANCHERIA
S-1
X
SWAMP
CERRO SAN CRISTOBAL
N
S-7
X
SWAMP
0
1
SCALE IN KM.
S-8
TRAIL TO BLASILLO
Ⓢ AREAS TESTED (S-1, S-2, etc. = SHERD AREA 1, 2, etc.
EXTENT OF STRUCTURAL FEATURES BELIEVED TO BELONG TO CENTRAL GROUP ON BASIS OF ALIGNMENT OF FEATURES
O MOUND
X AREAS INVESTIGATED, WITH NO SHERD DEPOSITS
A COMPLEX 'A'
GM GREAT MOUND.

Figure 1.—Sketch to show approximate relationships of structures, sherd areas (S-1 to S-8), and monuments at La Venta. This and the following sketch maps (figs. 1-8) are to approximate scale only. Note: Variation of the magnetic campass in 1942-43 was 9° 10′ E [U. S. N. Hydrogr. Off. Chart No. 1706].

Flora and fauna of La Venta are pretty much the same as those of Tres Zapotes in the Tuxtla region, for climatic conditions, soils, and soil climates are very similar. It may be that annual precipitation figures would show a slightly greater rainfall at La Venta, lying as it does not only nearer but directly south of the Gulf, and being surrounded by swamps. To a nonbotanist, however, the plant cover, both second growth and old forest, looks about the same in both places, and not only the domestic crops but the planting and harvesting seasons are the same. (I refer of course to the floral conditions of the island, not of the swamp.) Two crops of corn a year, a minor "quick crop" planted just before, and the main one just after the February-to-May dry season, are the rule. While coffee is the chief cash crop of present-day inhabitants, cane was grown with some success in the recent past. An occasional rubber tree planted for local use is to be seen here and there. Small plantings of pineapple, sweet potatoes, jícama, etc., are made for home consumption. The faunal assemblage appears nothing remarkable for the general area. Of larger forms, deer, peccary, kinkajou, howler monkeys, jaguar, and ocelot are found. None of these are at all abundant, however. Local people assured us that these animals (with the exception of the monkeys), could pick their way through the swamps even in the wet season and thus tended to visit the island from the more extensive high ground of Blasillo where they are all more abundant, rather than dwelling there permanently. Among smaller forms, rabbits, squirrels, kinkajous, opossums, and mice are most common. The bird life appears to be quite rich, and to follow the general pattern of the Tuxtla region.

Archeologic remains.—The archeologic remains at La Venta consist of a few earth mounds and other structures, a number of large stone monuments, and refuse deposits. There are no elaborate complexes consisting of numerous mounds, as for example at Tres Zapotes, but the principal group of structures and monuments shows evidence of purposeful arrangement. This part of the zone, which we may term the Central Group, is built around the largest mound of the site and the Ceremonial Court which lies just to the north. The top of the Great Mound has been measured as 32.3 m. above the adjacent ground level; it forms the dominant landmark of the site. Its horizontal dimensions are hard to establish because of the heavy forest cover. The mound proper rests on a rectangular platform 4 or 5 m. high (included in the over-all mound height) which measures about 120 m. north–south, and which appears to be a trifle narrower, east–west. On the south side of the mound, extending out over the platform, are two aprons, on one of which are two much-battered basalt altars (Altars 2, 3).[3]

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[3] Nomenclature of stone monuments is according to Stirling, 1943 a.

About 100 m. north of the Great Mound is the Ceremonial Court which appeared before investigation as a slightly elevated rectangle enclosed by vertical basalt columns whose ends just showed above the surface. The court and its surrounding features north of the Great Mound have been designated " Complex A." The court itself is A–1. On the north side of the court is a broad gently sloping mound (A–2) about 4 m. high, and just off the south edge two small mounds 1.5 to 2 m. above the general ground level. A line from the top of the Great Mound to the top of Mound A–2 bears 7° west of true north. This line runs through most of the features of the Central group. Since this court was subjected to some methodical investigations, it will be described in more detail in connection with the account of those excavations. Some 110 m. north of Mound A–2 is a row of three large stone heads (Monuments 2, 3, and 4), facing north, forming an irregular line approximately 100 m. east to west. According to local accounts, there used to be a large flat stone, presumably the top of an altar, exposed in the space between the Ceremonial Court and the row of stone heads. We were unable to find it, however, and did not have the time necessary for falling a strip through the dense tangle of second-growth bush to look for it properly. A good half mile north of the stone heads, and more or less on the same north-south line, is a small basalt altar (Altar 6), which probably marks the north edge of the Central Group.

Returning to the Great Mound again, to the south, just off the edge of the platform, is a large stone head (Monument 1), and a little farther on, a stela (Stela 2). About 400 m. south is a small complex (Complex B), consisting of a long mound oriented north-south with a large stone altar on either side (Altars 4 and 5), and a medium-sized pyramidal mound just to the west. On top of the long mound is a long slender column, and several columns lie in a gully just to the north. At the southern edge of this Complex B are three or four medium-sized mounds, averaging about 5 m. in height and 15 m. or so in diameter. Between the Complex B and the Great Mound are several small mounds, one of which has a column of green schist protruding from it. To the east, well off the line of the Central Group arrangement, is the large "Jaguar altar" (Altar 1).

Some 500 m. farther south of Complex B is a small mound which caps the end of a steep little ridge. On this are three great sandstone blocks (Monuments 8, 9, and 10), boldly but so crudely carved that their motifs could not be made out from the sections exposed by tunneling under them. These probably mark the south end of the Central Group. Six hundred to eight hundred meters farther on are a number of medium-sized mounds which constitute a separate complex, since they do not seem to line up at all closely with the Central Group of features. These may be designated the South Group.

Just east of Altar 1, on a system of low ridges that slope down into the margins of the swamp, are two or three mounds of small to medium size. There are said to be some basalt columns in this vicinity.

To the southwest across the alinement of the Central Group, nearly on the opposite edge of the island, are a number of small mounds. No determinable arrangement could be seen among them; if there is any, it is hidden by the heavy cover of forest in that locality.

On the northwest corner of the island there is a small and apparently separate unit which we may designate according to the local name of its most prominent member as the Cerro del Encanto group. The main mound is steeply conical, and a little over 20 feet high. On its north slope there is a column with its upper end pecked into a rough knob. Local reports have it that there used to be another stone, and quite a large one, somewhere on the south side of this mound, but it "has disappeared" and our probing did not locate it. Several small mounds surround the central structure.

THE 1942 EXCAVATIONS

The investigations carried out in 1942 can be described best by grouping them according to type and purpose of the excavations, that is to say, test trenches, stratigraphic sections, and structural explorations. The test trenches were dug in order to locate and probe refuse beds containing pottery, and to collect information on occupancy of the site, and therefore form a unit-group both in method and in purpose. The stratigraphic sections were laid out on the basis of information from the test trenches, and designed to collect controlled lots of ceramic material. The structural investigations were aimed at recovering data bearing on the ceremonial, and it was hoped, artistic aspects of the culture. We may begin with an account of the test trench operations.

TEST TRENCHES

In the course of the season an even 40 test trenches were dug in various parts of the site. For the most part they were dug in groups in localities where sherds were abundant on the surface or could be seen exposed in stream banks. It is well to make clear here that there is no uniform sherd-bearing layer covering the island, but that sherd deposits have restricted distributions and require considerable search. The aid of the local people proved invaluable in finding likely places for tests, for they, having farmed and hunted over almost every foot of the island know where the more important sherd areas are. It seems well to state too that the localities to be described were not the only ones inspected. Most of the surface of the island was searched during the course of the investigations.

The test trenches were all laid out 3 m. long by 1.5 m. wide, and dug down well into the sterile subsoil. The cultural material coming from them, save for figurines, was not saved. A rough count however was made of the sherds recovered, which was used in calculating the sherds-per-meter yield, and observations were made as to the presence and quantity of stone objects, such as metate and mano fragments, and the like, as well as on the soil type of the deposit, and occurrence of quantities of charcoal and ash.

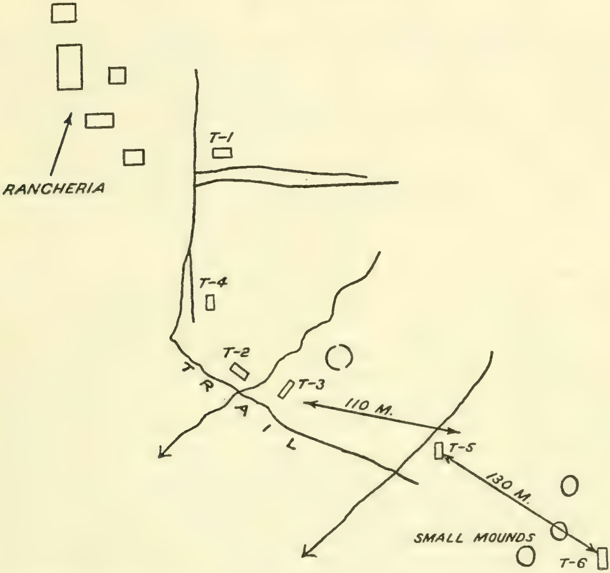

Figure 2.—Sketch map, locality of test pits 1–6. Sherd area 1 (S–1) in fig. 1.

Tests T–1 to T–6 were laid out to explore the locality of small mounds to the west of the Central Group. Stirling had made a small collection of sherds from a creek bed in this locality on his initial visit, and the abundance of washed-out material suggested this might be a likely place. T–1 was located at the edge of the higher ground on which the modern ranchería is situated (fig. 2). T–2, T–3, and T–4 were intended to test the banks of the stream in which such quantities of sherds could be seen, and T–5 and T–6 were staked out 110 and 220 m. east-southeast of T–3 among the small mounds. The following tabulation summarizes the results of the tests in this locality:

TABLE 1.—*Summary of test trenches T–1 to T–6*

Trench No.	Total depth	Sherd layer	Yield per cu. m.[1]	Condition [2]	Remarks
	cm.	*cm.*			
T–1	178	0 to 96/109 [3]	100	Fair	Figurines abundant.
T–2	269	0 to 111	60	Poor	Sherd layer: sand.
T–3	223	0 to 84	55	Poor	Sherd layer: sand.
T–4	213	66 to 165	150	Poor	Sherd layer: sand.
T–5	159	0 to 53	8	Poor	Numerous metate fragments.
T–6	180	None	0		

[1] Approximate only. Based on rough sherd count, divided by nearest cu. m. of sherd-bearing soil.

[2] Condition in three-step scale: Good; Fair; Poor. These appraisals are relative only—the best of the La Venta sherds are heavily leached.

[3] Bar (/) in measurements indicates irregularity of stratum; i. e., "0 to 96/109" means contact of layer varied from 96 m. to 109 m. from the surface within the area exposed by the trench.

Inspection of this tabulation shows that of all these trenches, only T–1 sectioned a deposit of sufficient richness and in which the sherds were sufficiently well preserved to make worth while further digging. The heavily eroded nature of the sherds from T–2, T–3, and T–4, and the fact that these materials occurred in light sandy soils, indicates that they are in all probability redeposited in old filled-in stream beds. The source of the material could not be determined, unless the most of it came from the slightly higher ridges in which T–1 was dug. The area of occupancy and redeposition dwindles away rapidly to the eastward, as T–5 and T–6 show. A short distance east of the latter, and clear over to the line of the Central Group, the red clays (the local subsoil) appear at the surface. A few additional data on this locality are available, thanks to the drilling of holes for the testing operations of the oil geologists. At the northern edge of the locality occasional sherds were encountered at considerable depths, 3, 4, 5, and in one case 7 m. below the present surface. The matrix of this material, however, was invariably light sand; in no case was anything like dark soil suggesting primary deposit observed. Apparently an extensive drainage system, which was filled in by an accumulation of drift and alluvial material, formerly cut through this part of the site. Consequently it seems very unlikely that we have to do with buried occupation strata here. This is a consoling thought in view of the fact that the water table at the height of the dry season stood within 2 and 3 m. of the modern surface at the points from which these washed-down sherds were recovered.

Tests T–7 to T–10 were dug in the broad swale in the vicinity of Complex B (fig. 3). T–7 was located adjacent to the small mounds at the south end of the subgroup; T–8 in front of the easternmost of the two large altars; T–9 and T–10 were dug at either edge of the floor of the hollow. I marked these locations, it should be stated,

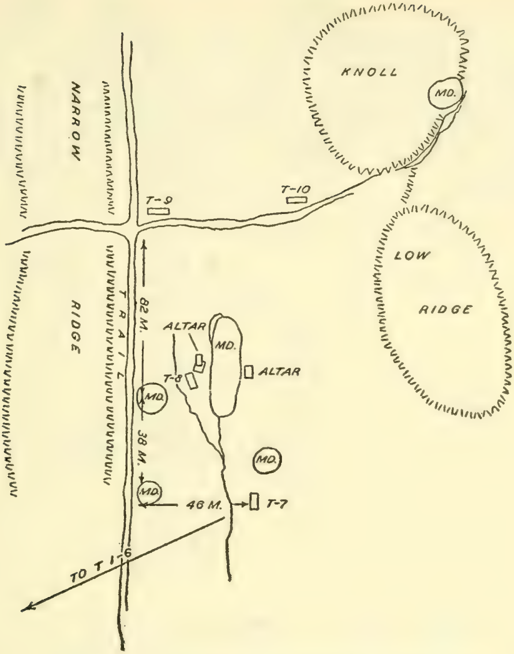

Figure 3.—Sketch map, locality of test pits 7–10. Sherd area 2 (S–2) in fig. 1.

against the advice of the local people who told me there were no sherds there. They were quite right. None of these pits, which were carried down to depths ranging from 150 to 210 cm. yielded anything more than a scant handful of badly eroded scraps of pottery from the uppermost few inches, and some handsome examples of sterile subsoil. With this system of tests may be added T–11, dug alongside of the large stone head at the south side of the Great Mound, which likewise yielded nothing.

The locality of tests T–12 to T–21 (fig. 4), staked off on the ridges forming the west edge of the swale, and just to the north of the preceding series, resulted more positively. T–12 and T–13 were dug in a slight hollow that traversed the ridges; T–15 to T–21 were dug to the north and south of them along the main ridge. T–14 was dug in a small knoll a short distance to the west of the ridge. A tabulation of the results of this series follows:

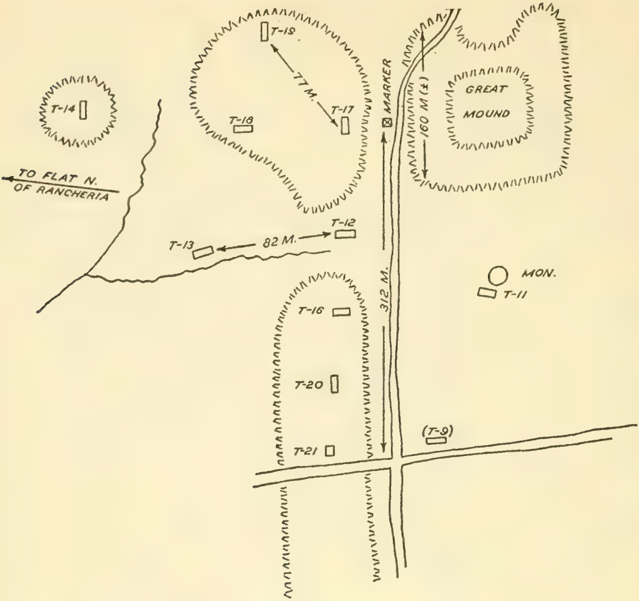

FIGURE 4.—Sketch map, locality of test pits 11–21. Sherd area 3 (S–3) in fig. 1.

TABLE 2.—*Summary of test trenches T–12 to T–21*

Trench No.	Total depth	Sherd layer	Yield per cu. m.[1]	Condition [2]	Remarks
	cm.	*cm.*			
T-12	228	0 to 100/112 [3]	250	Fair	
T-13	[4] 271	0 to 271	130	Fair	Sherd layer water deposited.
T-14	203	0 to 81	([5])		Appeared artificial fill.
T-15	193	0 to 91/143	60	Good	3 small complete vessels.
T-16	254	0 to 152/177 [6]	85	Good	
T-17	132	0 to 114/122	160	Good	Metate fragments, some figurines.
T-18	233	0 to 161	100	Fair	Some sherds in alluvium 161 to 215 cm.
T-19	188	0 to 127	125	Good	Large bowl fragments.
T-20	193	0 to 125/135	66	Fair	
T-21	112	0 to 74	40	Good	

[1] Approximate only. Based on rough sherd count, divided by nearest cu. m. of sherd-bearing soil.

[2] Condition in 3-step scale: Good; Fair; Poor.

[3] Bar (/) in measurements indicates irregularity of stratum: i. e., "0 to 25/37" means contact of layer varied from 25 cm. to 37 cm. from the surface within the area exposed by the trench.

[4] Water level.

[5] Almost none.

[6] Sharp depression in subsoil to 224 cm. in one end of trench, filled with mix.

The general picture of the deposits in this locality is obviously more promising. Not only were the sherd layers shown to be relatively thick, but the condition of the fragments was better. Only in two instances, T–13 and the base of T–18, did the deposit appear to be mainly alluvial fill, and this was to be expected owing to the location of the two tests, one being near the mouth of a little draw that cuts through the ridges, and the other on a terrace or bench halfway up the main ridge. It was on the strength of these findings that the first stratigraphic section, Str–1, shortly to be described, was staked out in this locality.

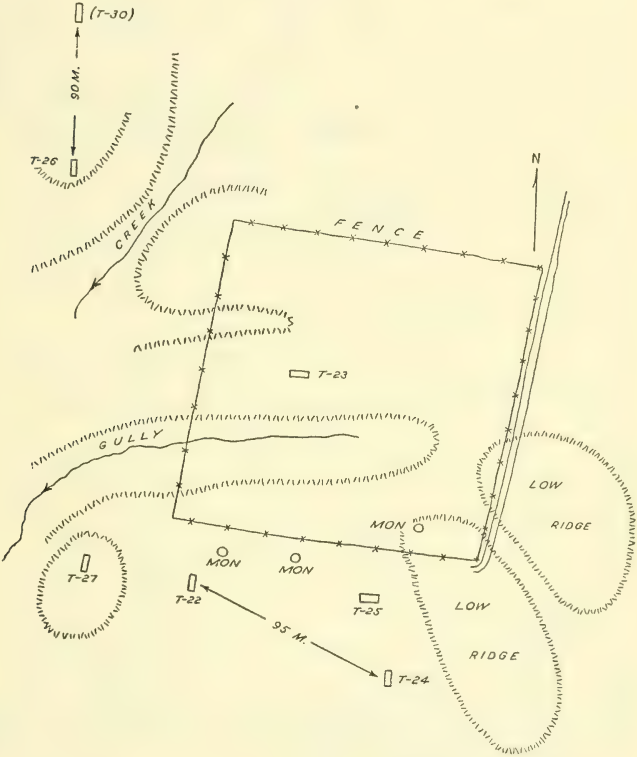

Figure 5.—Sketch map, locality of test pits 22–27. Sherd area 4 (S–4) in fig. 1. Monuments shown are small stone heads just north of Complex A.

Tests T–22 to T–31 were scattered over the hilly area from the Ceremonial Patio to the north edge of the island (figs. 5, 6)). Since few of them revealed deposit of any depth or richness, they may be grouped into a single locality despite their rather wide distribution.

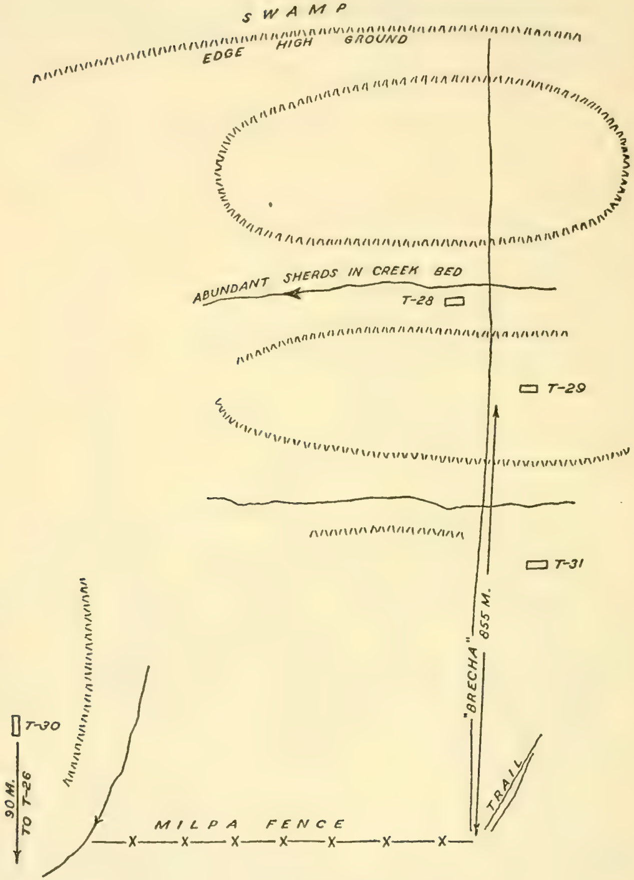
SWAMP
EDGE HIGH GROUND
ABUNDANT SHERDS IN CREEK BED
T-28
T-29
T-31
T-30
"BRECHA" 855 M.
TRAIL
90 M. TO T-26
MILPA FENCE

Figure 6.—Sketch map, locality of test pits 28–31. Sherd area 5 (S–5) in fig. 1.

TABLE 3.—*Summary of test trenches T–22 to T–31*

Trench No.	Total depth	Sherd layer	Yield per cu. m.[1]	Condition [2]	Remarks
	cm.	*cm.*			
T–22	195	0 to 99 [3]	50	Fair	
T–23	125	0 to 48	Scant	Fair	
T–24	157	0 to 106	15	Poor	
T–25	167	0 to 134	Scant	Poor	Appeared alluvial fill.
T–26	167	0 to 96	60	Poor	
T–27	152	0 to 81	Scant	Poor	
T–28	228	0 to 109	10	Fair	Near sherd-filled creek bed.
T–29	162	0 to 44	Scant		
T–30	160	0 to 50/78 [4]	Scant		
T–31	150	0 to 89/101	30	Fair	

[1] Approximate only. Based on rough sherd count, divided by nearest cu. m. of sherd-bearing soil.
[2] Condition in three-step scale: Good; Fair; Poor.
[3] Pit from sherd layer in west end of trench to 177 cm.
[4] Bar (/) in measurements indicates irregularity of stratum; i. e., "0 to 25/37" means contact of layer varied from 25 cm. to 37 cm. from the surface within the area exposed by the trench.

The negative yield of most of these cuts speaks for itself. It is worth repeating however that occasional surface sherds, or as in the case of T–28, numerous washed-out sherds in an arroyo bed, occurred in the vicinity of every test pit.

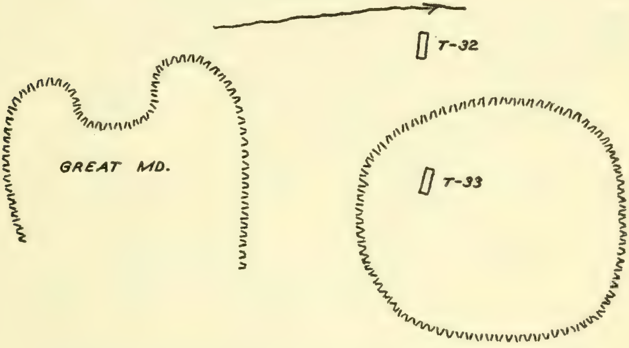

FIGURE 7.—Sketch map, locality of test pits 32–33. Sherd area 6 (S–6) in fig. 1.

Tests T–32 and T–33 were laid out just to the east of the High Mound (fig. 7). T–32 was dug in a little swale close by a stream bed in which great quantities of sherds were to be seen. It produced an abundance of sherds. The soil matrix however suggested that most of this material probably was washed down from the ridge behind the trench, and for this reason T–33 was dug on the higher ground, in hope of tapping the primary deposit. The results of this excavation were negative, however. The measurements follow:

TABLE 4.—*Summary of test trenches T–32 to T–33*

Trench No.	Total depth	Sherd layer	Yield per cu. m.[1]	Condition [2]	Remarks
	cm.	*cm.*			
T–32	162	20 to 109	400	Fair	Few sherds in alluvium below 109 cm.
T–33	186	0 to 48	20	Fair	Pit in south end to 87 cm.

[1] Approximate only. Based on rough sherd count, divided by nearest cu. m. of sherd-bearing soil.
[3] Condition in three-step scale: Good; Fair; Poor.

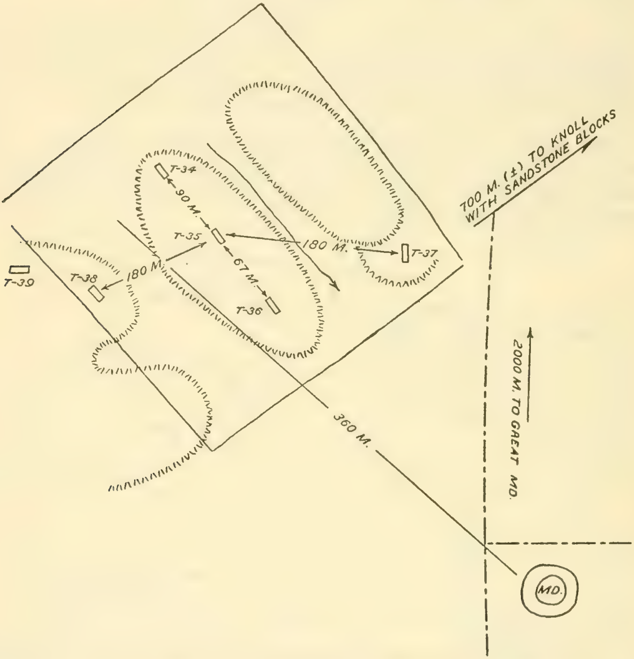

FIGURE 8.—Sketch map, locality of test pits 34–39. Sherd area 7 (S–7) in fig. 1. Solid straight line is edge of cleared area.

Tests T–34 to T–39 were dug to the south of the preceding localities, about a half kilometer west of the mound with the three sandstone monuments which appear to mark the south end of the Central Group (fig. 8). This locality, a considerable part of which had been cleared for milpas in recent years, appeared on the basis of surface sherds to be one of the richest of the site. Great quantities of pottery fragments occur there. The tests however revealed an unexpectedly spotty distribution of deposit:

TABLE 5.—*Summary of test trenches T–34 to T–39*

Trench No.	Total depth	Sherd layer	Yield per cu. m.[1]	Condition [2]	Remarks
	cm.	*cm.*			
T–34	134	0 to 116	scant	Poor	
T–35	198	0 to 175/183 [3]	225	Poor to Fair	Concentration in 76 to 175/183 cm. level, with much charcoal, ash.
T–36	188	0 to 85	20	Poor	
T–37	111	0 to 30	scant		
T–38	162	0 to 129	55	Poor	
T–39	177	0 to 107/111 [4]	30	Fair	

[1] Approximate only. Based on rough sherd count, divided by nearest cu. m. of sherd-bearing soil.

[2] Condition in 3-step scale: Good; Fair; Poor.

[3] Bar (/) in measurements indicates irregularity of stratum; i. e., "0 to 25/37" means contact of layer varied from 25 cm. to 37 cm. from the surface within the area exposed by the trench.

[4] Pit from sherd layer to 162 cm. in west end.

The final test pit, T–40, was dug at the extreme south end of the island on a low knoll about 50 m. across. Surface sherds were abundant on the elevation. A little over a hundred yards beyond, the firm ground disappeared beneath the edge of the swamp. The trench, put down to a maximum depth of 122 cm., revealed a rich sherd-bearing layer to a depth varying from 81 to 94 cm. The rough calculation gave a per-cubic-meter yield of 350 sherds, which were in fair condition. Occurrence of charcoal lenses, stone (mano and metate fragments), and the like, gave the impression of primary deposit.

The data from the test pits, in addition to pointing out the most likely localities for the digging of stratigraphic sections, offer some interesting clues as to the occupation of the island. We shall bring this question up again in another connection, but it may be brought out here that the evidence is all against the site having been occupied by a large group—not even as large a one as could have obtained their daily bread—or rather, their daily tortillas—from it. The meter or more of primary sherd deposits in some places point to a moderately long period of occupation, but the restricted area of such deposits, as witness the variation in yield of T–34, T–35, and T–36, a few hundred feet apart on the same ridge, very clearly indicates a rather small number of occupants. Re-use of deposits in mound construction does not enter into the question, for not only do no sherds appear on the eroded slopes of these features, but the structural investigations show that varicolored clays (sterile subsoil formations) were deliberately selected for building purposes. It is probably legitimate to regard the areas of deposit as the rubbish heaps of individual dwellings, or small clusters of dwellings, and these must have been scattered and few in number. The logical explanation is that the site was most likely never a "town" or independent subsistence unit in ancient times, but rather a ceremonial center occupied regularly only by a relatively small number of priests and perhaps nobles, and their households, except during brief periods of construction and monument moving. The manpower for all the major constructions must have been brought in from the scattered habitable areas for some distance around La Venta.

STRATIGRAPHIC TRENCHES

On the basis of the information afforded by the test pits, three stratigraphic sections were dug. These were put down in cuts approximately 30 cm. thick (due to the fact that the only steel rules that I had were marked in the United States system of feet and inches, the levels were dug in 1-foot (actually 30.48 cm.) cuts), all the sherds and other cultural materials from each level of each trench being carefully segregated. The levels are numbered from top downward; i. e., level 1 is the 0–30 cm. (actually 0–12 inches), level 2 the next below, and so on. Deep pits were put down into the subsoil in two of the cuts for the purpose of verifying the data on local soil formation from the tests.

The first of these, Str–1, was located on the main ridge of the locality tested by T–12 to T–21, between T–17 and T–19. While the deposit sectioned by these tests was slightly shallower than that of T–18, the indications of admixture of slope wash in the bed exposed by the latter made a section on the crest of the ridge preferable. The trench was 13.7 m. long north–south by 3 m. east–west. The depth of the trench was 152 cm., except in the south end, where a 3 m. by 3 m. pit was put down to a maximum depth of 355 cm. As exposed by the trench, the deposit consisted of a layer of medium dark brown sandy soil, with a thin very dark humus-stained cap, overlying an irregular subsoil of orange-red clay. Here and there in the brown mix were concentrations of charcoal, especially in the south end of the trench. The uneven contact of deposit and subsoil had been made still more irregular by numerous pits and hollows scooped out by the early inhabitants of the ridge, causing it to vary in depth from 91.0 to 162.5 cm. The average depth of culture-bearing deposit for the trench as a whole was about 122 cm. Aside from the humus-stained cap, there was no structural differentiation within the deposit. The subsoil below 228 cm. consisted of mottled orange and yellow-buff clays, becoming distinctly lighter in color (an increasing proportion of yellow material) toward the bottom of the depth test. In other words, the deposit had been built up by a combination of human activity, accumulation of wind-borne sand and light soil and processes of soil formation on top of a normal undisturbed soil horizon formed in situ. No inhumations, animal bones, or sizable stones were encountered in the excavation. The sherd yield of the two uppermost 30-cm. cuts (levels 1 and 2) were low but material was abundant in the remainder. Level 5 (122 cm.+) contained a fair amount of material from the pockets and pits in the original surface.

Str–2 was marked off 12 m. long in a NNE.-SSW. direction, by 3 m. wide, on the edge of the high ground on which T–1 was located. T–1 was the only test in that locality to have shown a primary deposit, and since it had yielded moderately in sherds and handsomely in figurines, seemed a fairly likely place for a stratitest. Str–2, however, whose southeast corner was but 6 m. up the ridge from T–1, gave only a niggardly yield. The deposit, which had only a low per-yard sherd content, varied from 62 cm. in depth in the north half of the trench to a maximum of 99 cm. in the southern end. Beneath the deposit lay 27 to 35 cm. of clean angular yellow sand, and under this the orange–red clay subsoil. The trench was excavated to a maximum of 91 cm. in the north half and 152 cm. in the south. Two small (1.2 by 1.2 m.) pits dug at 15 m. intervals outward from the southeast corner of Str–2 revealed low-grade deposit to depths of 101 and 83 cm., respectively. Apparently we had here another instance of the very spotty and localized distribution of deposit. T–1 must have cut into a rather small dump or concentration of debris.[4]

Str–3 was much more productive. It was laid out 12 m. long in a northeast-southwest direction by 3 m. wide, in the low knoll at the south end of the island close by T–40. It was a little more up on the crest of the knoll than the exploratory test pit. The yield was moderate at first but increased steadily downward. The deposit, consisting principally of a medium brown sandy mix extended downward to a point 150 to 155 cm. below the present surface. Some depressions at the northeast end extended 5 to 7 cm. deeper. Beneath lay a 33 to 36-cm.-thick layer of yellow sand (probably arkose materials), then 89 cm. of sand with some clay, which overlay the normal orange-red clay soil of the island. The trench was dug in 5 levels, each 30.48 cm. (originally 12 inches) to a depth of 152.4 cm., with a 3 m. by 3 m. pit in the northeast end to a maximum depth of 315 cm. from the surface. In the main trench, in levels 4 and 5 (at a depth of 99 to 101 cm. below the surface) was an area 25 to 32 cm. thick which was noticeably lighter in color and texture than the rest of the deposit, although no difference could be detected in quantity or condition of the sherds in it. It could not be determined whether or not this represented the beginning of a process of soil formation. The color change was made more striking by the occurrence of a very black pit or trench 1.5 to 1.7 m. across, which ran across the trench beginning at depth 84 cm. with its lower edge at 132 cm. Below the deposit in the northeast end was found a broken but complete Coarse Buff ware vessel. The lowest portions were at 195.5 cm. This object had apparently been placed mouth down in a pit dug into the sand before intensive occupation of that part of the ridge, for the pit was indicated only by a few random flecks of charcoal, not by mix as would have been the case had it been dug down from the upper levels.

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[4] Post holes, etc., dug in building camp some 250 feet across the ridge revealed 1.2 to 1.5 m. of sandy topsoil with low sherd content.

STRUCTURAL INVESTIGATIONS

As elsewhere remarked, the only explorations of structures in the 1942 season were conducted in Complex A just to the north of the Great Mound. Clearing of the cover of dense scrub which had grown up in the 15 or 20 years since the locality was last farmed revealed the Ceremonial Court itself (A–1) to be an elevated rectangle 56.8 m. by 43.2 m. Its long dimension lay at right angles to the N. 7° W. (353° T.) line that runs through most of the features of the Central Group. The eastern and western edges are marked by broken lines, probably once continuous, of vertically placed basalt columns, whose tops extend a foot or two above the present surface. On the north side the rows of columns make corners, continuing for short distances toward Mound A–2. The central portion of their course is interrupted by the lower slope of Mound A–2, which stands just off the north side of the court. This feature, which stands nearly 4 m. above the level of the adjacent terrain, and about 2.5 m. above the present level of the court, is elliptical in plan, extending approximately 30 m. east-west and 18 m. north-south. It was in this mound that the first of the structural trenches was dug in 1942. To the south of Mound A–2, directly on the line from its crest to the top of the Great Mound, is a low elevation just inside the southern border of the elevated area. This was the location of the second 1942 trench. Interrupting the southern edge of the platform are two rectangles roughly 8 m. square, and 9 m. in from either corner. These are marked by slight elevations surrounded by incomplete rows of vertical columns. They appear to extend out a short distance from the general line of the court and give a bastionlike effect. In the western rectangle was dug a system of excavations in 1942. A fourth cut was dug in the northwest corner of the court to explore the construction of the "fence" of basalt columns. In addition to the features just described, there is a small mound (Mound A–3) flanked by two long tumuli (A–4 and A–5), just south of the court. None of these were investigated in 1942. Two stone monuments occur at present within the enclosure, Stela 3, and Monument 5, on the west and east sides, just in from the small rectangles. There were formerly more, for according to local information Stela 1 was dragged out of the enclosure years ago by loggers, and several

Olmec monuments now in Villahermosa, Comalcalco, and Finca San Vicente are believed to have come from this same place.

The trench in Mound A–2 was laid off 4.5 m. wide by 9 m. long, with its northern end inside a row of five inclined columns that showed just above the surface of the ground. It was subsequently enlarged to permit the excavation of a number of features encountered (fig. 9). The first of these was the Tomb. The inclined columns were found to be leaned in against a layer of nine horizontal ones, running east and west (pl. 1). The two northernmost, and the sixth and seventh (counting from the north) had snapped in two from their own weight and sagged down inward. Continued digging showed the horizontal members to be supported at either end by a wall of vertical columns, with a row of five under the ninth column closing off the south end of the structure. Flanking the inclined columns which covered the north end were three stepped blocks which thus closed the side openings of the "doorway." All these stones were of columnar basalt, varying from 33 to 43 cm. in diameter. Those forming the roof varied from 2.97 m. to 3.55 m. in length; those covering the entry, 2.81 m. to 3.09 m. Removal of the inclined columns disclosed that the structure had been intentionally filled with the same bright orange-red clay of which the mound was built. Series of thin horizontal and lenticular areas marked by slight color differences in the fill indicated loading. On excavating this material, a floor of flat waterworn slabs of limestone appeared 1.62 m. below the roof. The wall columns varied somewhat in length. Apparently some, a trifle longer than the rest, had been set more deeply in the clay base to avoid having to cut them to length. It is worth noting that in the case of roof and wall columns alike, the widest and smoothest of the five sides of each column had been faced toward the inside—the structure was obviously built for interior rather than for exterior appearance. Just over the paving of the floor was a layer of heavy olive-brown clay or swamp muck 5.0 to 15.2 cm. thick. Within this, heavily coated with red cinnabar (?) paint, were the remains of two bundle burials, each probably containing at least one individual (fig. 10, *a*). Little remained of the acid-leached bones save for a mass of splinters, stained a dark chocolate-brown color. They appeared to be remnants of long bones mainly, and gave the impression of small light bones, probably of juveniles, as did the deciduous teeth found in Bundle 2. With each bundle were associated a number of small objects, for the most part of jade. Bundle 1 contained the following: 1 small seated figurine of jade, representing a male; 1 flat conventionalized standing figurine; 1 pendant of jade in the form of an elongate clamshell; 2 matching rectangles of jade, perforated at the center, with engraved designs; 3 small D-shaped jade objects;

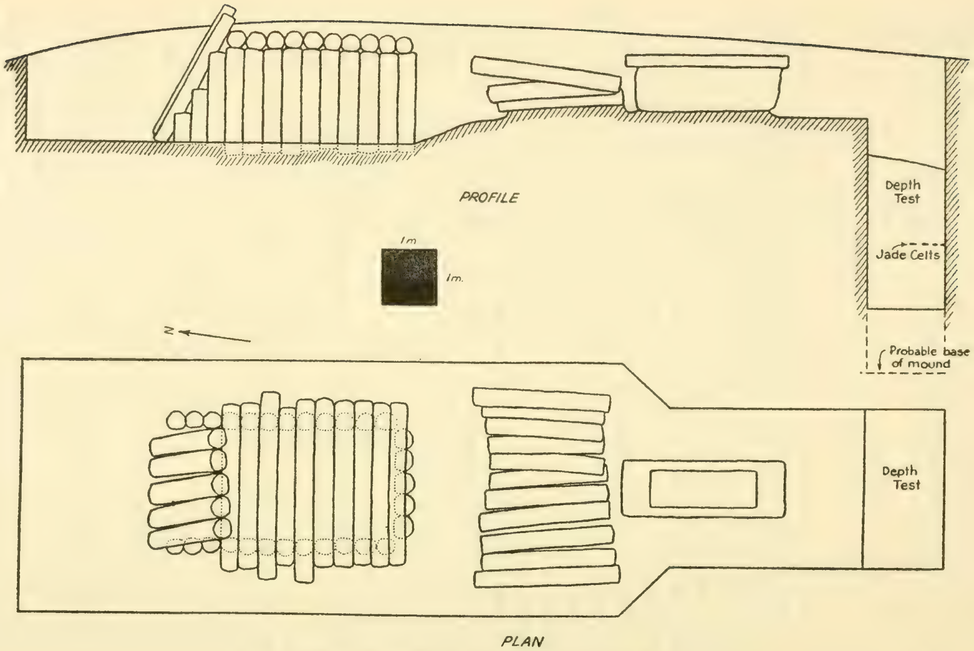
Depth Test
Jade Celts
Probable base of mound
PROFILE
1m
1m.
N
Depth Test
PLAN

FIGURE 9.—Elevation and plan of features in A-2.

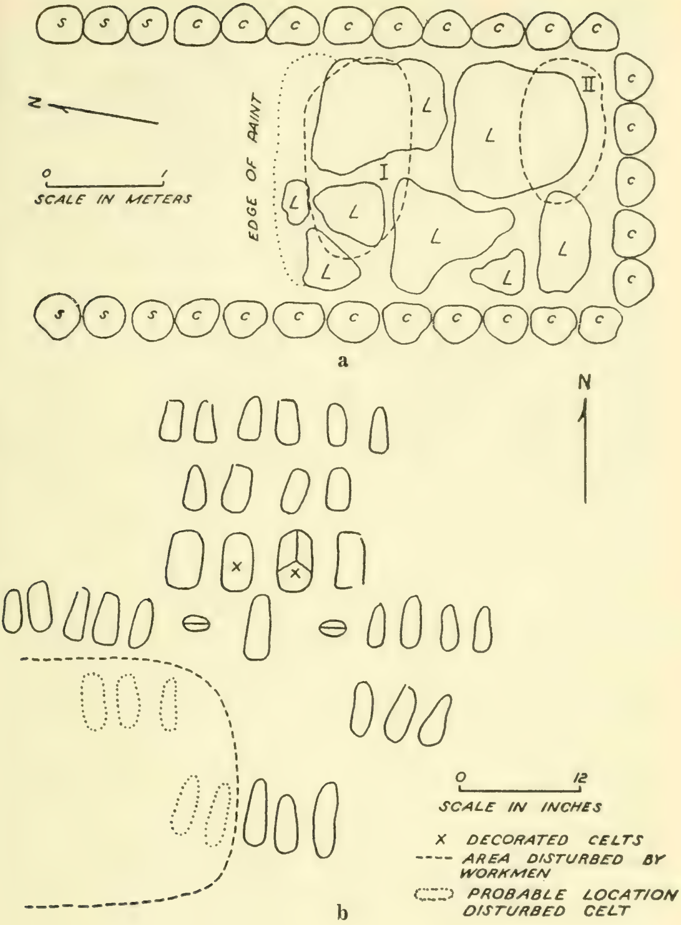
S
C
L
I
II
N
0
SCALE IN METERS
EDGE OF PAINT
a
N
X
0
12
SCALE IN INCHES
X DECORATED CELTS
---- AREA DISTURBED BY WORKMEN
PROBABLE LOCATION DISTURBED CELT
b

FIGURE 10.—*a*, Plan of tomb, Mound A–2. *c*, Basalt columns of walls. *s*, Short basal columns at entryway. *l*, Limestone slabs, or flagging. *I*, Burial bundle I. *II*, Burial bundle II. Compass arrow points True North (000°). *b*, Celt cache, Trench P–1.

2 matching polished obsidian disks (eyes of a mask?); 1 elliptical polished hematite object (mirror?) with three perforations; 5 cylindrical jade beads; and a rectangular block of serpentine 23.5 cm. by 18.1 cm. by 7.9 cm. thick, squared and polished on the sides and one face. Bundle 2 contained: 1 small seated jade figurine, representing

a female, with a polished hematite disk ornament on her breast; 1 conventionalized standing jade figurine; 2 matching hands of jade; 1 jade object shaped like a modern awl handle; 1 small disk with a central perforation and scalloped edge; 1 small jade ornament representing a frog; 1 jade object representing a sting ray tail, along with the remains of a number of real tail tips; 1 small heart-formed object of jade; 4 tubular jade beads; and 1 shark tooth.[5]

A test under the floor of the tomb gave no indication of deeper deposits associated with this feature. That and the fact that some of the wall columns ended at about the level of the limestone flagging indicated that the tomb had been built solely to house the two bundles and their contents just described.

The trench walls to the east and west of the tomb showed clearly low irregular mounds at either side, just a trifle lower than the walls of the tomb. Probably these were reinforcing or bracing structures erected as construction aids. All the evidence—these rough buttresses, the careful interior facing of the columns, the deliberate filling of the structure—points to its having been built to be buried by the mound. It was clearly never intended to stand out as an edifice crowning the elevation. While difficult to prove, the peculiar type of construction, unparalleled so far as I know in Middle America, suggests an imitation in stone of a pattern of construction of logs. In this region of abundant wood and little serviceable stone, poles and logs were probably the normal building materials. Only for structures of especial importance would other materials be sought, and then they were utilized in the same fashion as the more customary wooden materials.[6]

At a point 3.8 m. south of the tomb, very shallowly buried, there appeared a rectangular sandstone slab 312.4 cm. long by 109.0 cm. wide and averaging 20.3 cm. thick. The top and sides were neatly dressed and squared. In the top was a rectangular depression carved to a depth of 1.9 cm., and 205.6 cm. long by 73.6 cm. wide. The block was broken in several places, the north end, in fact, being pretty badly shattered. It was found to be the cover of a rectangular sandstone coffer. The box was 281.9 cm. long by 96.4 cm. wide, 88.9 cm. high on the east side and 81.2 cm. on the west. Its base was just slightly higher than the floor of the tomb. On the north end was a strongly carved "jaguar mask" (pl. 2, *left*), and along the two sides a decorated band and the remnants of stylized legs could be made out. The south end was so badly eroded that no trace of a design, if it ever had one, could be seen.

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[5] These tomb finds are merely to be listed for the present. They will be described in detail in a later section.

[6] Pole beams, supported by wooden posts varying from light to massive, held up the roofs of most of the Kaminaljuyú tombs. (Kidder, Jennings and Shook, 1946, pp. 46–85, and pp. 87–88.) The method of support is similar, though none were entirely roofed over with beams.

Removal of the broken portions of the cover showed a compact intentional fill of clay. The rectangular cavity of the coffer on excavation proved to be 238.7 cm. long by 68.5 cm. wide, and 58.4 cm. deep. Sides and bottom were well smoothed, and the corners were very nearly square. Lying on the bottom of the box were a serpentine figurine, two large thin jade ear spools, two hollow-ground pendants in the form of jaguar teeth, one with each ear spool, and a long pointed object of jade which may have been a punch or awl or an ornament meant to be inserted in a wooden mask. While the box, to western eyes, gave the impression of a great sarcophagus, there was not the least indication that it had been used or even intended for a burial. There were no traces of bone—not even tooth caps or discoloration in the clay—in it. Perhaps it was a receptacle for offerings, or once contained an image of wood or matting, or similar perishable nature.

Between the Tomb and the stone box, nearly touching the latter, was a series of 11 irregularly placed basalt columns, 2.2 m. to 2.9 m. long, of the same sort as those used in the construction of the tomb, but of smaller diameter and less regular cross section. They were all laid more or less north–south, and varied in depth from the mound surface at that point from 0.68 m. to 1.49 m., some being considerably tilted. Those in the middle averaged deeper than the outer ones. The intervening spaces varied; some of the columns nearly touched, and some were far apart. Investigation in 1943 proved them to have covered a deposit of small articles of jade.

Excavation of a depth test in the south end of the trench showed at least one enlargement of the mound. There may have been others. At a depth of 2.61 m. measured from the peak of the mound was a clearly marked contact line of enlargement. The superimposed structure likely represents a unit construction and includes tomb, box, and covering. At a depth of 3.85 m. an offering of jade celts was found extending back into the wall from the test. There were 37 of these objects, laid out in neat rows, bits to the north except 2 which were stood up on end (fig. 10, *b*). Five were removed by workmen's picks, but their probable position is indicated on the diagram. Three of the largest have glyphlike engravings. The objects were embedded in a layer 7 to 10 cm. thick of very compact olive-brown clay.

Continued excavation in the depth test to 1.2 m. below the level of the celts showed the mound material to continue downward. The original preconstruction surface was not found, but comparison with the ground level revealed in the trench in A–1 suggested that it lay between 2.0 and 2.4 m. below the level of the celt cache.

In the general digging to clear the tomb, two small jade ear spools, a few jade beads, and an incomplete serpentine figurine were found over an area of 2 m., or so, to the south of the structure. These objects were scattered in the clay mound material with no indication that they had been purposefully placed there. It is worth comment at this point that both the lower portion and the enlargement of the mound were built entirely of tight local clays, of the orange-red and the mottled red and-yellow (transition zone) varieties. No topsoil whatsoever was used. Not more than a half dozen sherds, and these badly leached, were encountered in the entire excavation, but occasional flecks of charcoal and nearly disintegrated shot-size crumbs of pottery could be seen throughout the mound mass, indicating the artificial nature of the deposit.

The second 1942 trench, P–2, in Complex A was dug directly in front of Mound A–2 in the low elevation on the south side of the Ceremonial Court. It was originally laid out 6 m. north-south by 3 m. east-west, with the two extensions added subsequently, a 3 m. by 1 m. one in the northwest corner, and a 2.4 m. by 3 m. one in the middle of the east wall. This trench yielded nothing at all in the way of ceramic or other material but revealed a structure or series of structures of some complexity (fig. 11). The completed profile of the west wall shows what appear to have been four enlargements of an original low stile-like entryway (A in the profile diagram). Each addition was made of clays or sandy clays deliberately selected for their color. The basic structure (A) consists of a thick layer of mottled pink-and-white clay on a low base formed by layers of orange-and-buff sandy clays with streaks of white. This in turn rested on what seems to have been the original ground surface, an easily recognizable humus-stained sandy soil. Incidentally, no formation of pink-and-white clay similar to the cap of this structure was encountered by us anywhere on the island. Stile A seemed to have had low broad treaded steps on either side. Above this was enlargement B, consisting of a sandy clay fill, capped by thin layers, or floors, of vividly colored clays, red, white, orange, and buff in color. A deliberate attempt seems to have been made to cover each color with a contrasting one (pl. 2, *right*). The layers varied from 0.3 cm. to 1.2 cm. in thickness, and looked almost as if they had been painted on in thin solutions, so evenly laid and level were they. At either end they descended in rather steep steps, apparently cutting off the lower parts of Stile A. C again consisted of a fill with a distinctive cap. In this case the cap, or floor, 1.19 m. below the present crest, was a layer of clay which had been burned to a dark red. Three large areas containing considerable charcoal rested directly on this clay, extending out from the wall into the area of the trench. The steps of this structure were apparently wider-extended and had been cut off by the succeeding enlargement. Stile D consisted simply of mottled orange-and-buff clay without a special cap. Its steps on the

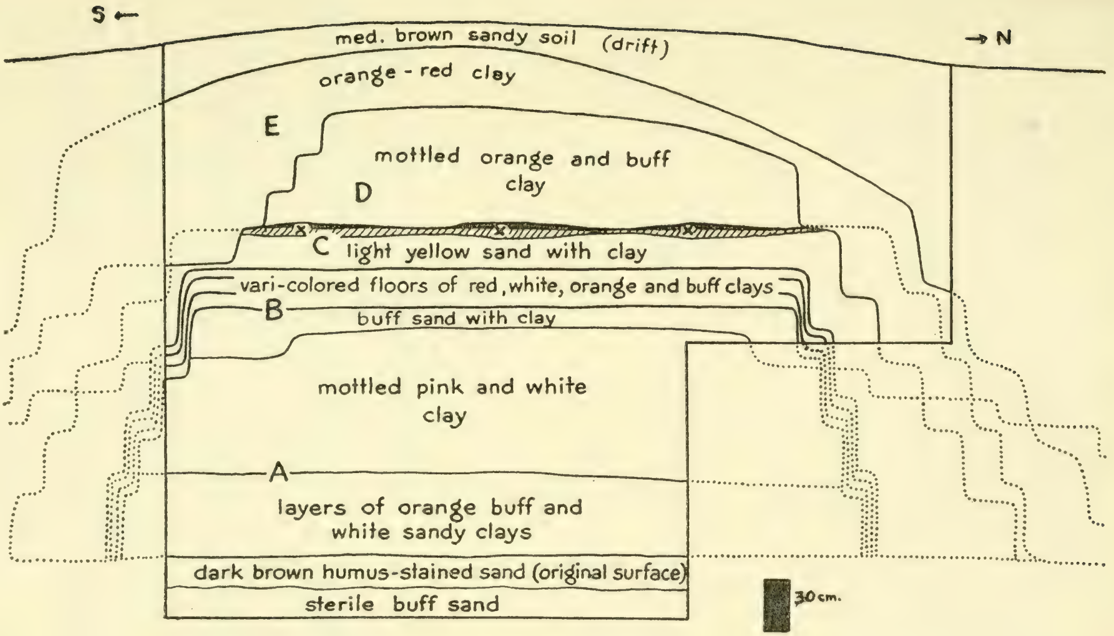
S ←
→ N
med. brown sandy soil (drift)
orange-red clay
E
mottled orange and buff clay
D
C
x
light yellow sand with clay
vari-colored floors of red, white, orange and buff clays
B
buff sand with clay
mottled pink and white clay
A
layers of orange buff and white sandy clays
dark brown humus-stained sand (original surface)
sterile buff sand
30 cm.

FIGURE 11.—West wall, trench P-2 through entryway of Ceremonial Court, A-1 (asymmetric scale).

south side were shorter—more comfortable—than those descending on the north. There appears to have been a sort of landing a little more than halfway up on the south side. E, the final structure, was somewhat domed instead of being flat on top like the rest. Although this form may be due to erosion, its maximum height above the original (?) ground level was 2.89 m. Only one of its steps was sectioned by the trench—a high awkward-looking one on the north side. This final enlargement is capped by a layer of light sandy soil, presumably wind-blown deposit, which has accumulated in a thin layer on top and thicker over the descending sides of the entry since abandonment of the site. There can be little doubt that these structures formed the entryway to the ceremonial enclosure.

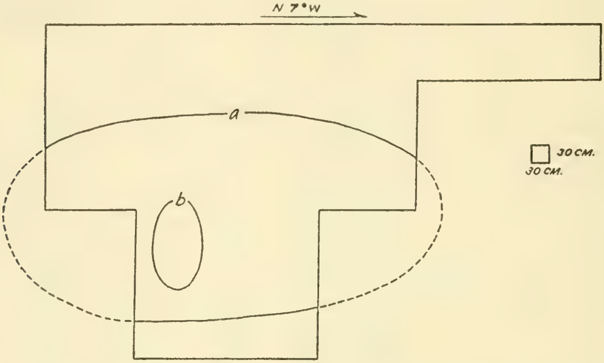

FIGURE 12.—Plan of trench P–2 through entryway of Ceremonial Court, A–1.

The profile of the east wall of the trench differed from the preceding due to a large pit that had been dug down through the early structures, presumably from enlargement E. The outline of the pit was the most clearly observed at the 119 cm. level, where it passed through the charcoal-covered floor of structure C. It was for the purpose of defining the limits of this pit and excavating it that the extension was dug in the east wall (fig. 12). The pit narrowed down funnel-fashion to an off-center elliptical bottom 1.67 m. long by 0.81 m. across, a few centimeters below the dark humus-stained subsoil line. The pitfall all the way down was marked by the mixture of the various colored clays of which the structures were composed, chunks of the still-adhering floor layers of B being quite noticeable. The pit contained no burial or cache or anything else to indicate a reason for its existence. The several structures continued on beyond it in the east wall of the extension.

The excavations, P–3, in the western of the two bastionlike rectangles consisted of a set of trenches to clear and investigate the small stone enclosure near the southwest corner of the Ceremonial Court. It was found to consist of a rectangle formed by 1.8 to 2.1 m. lengths of columnar basalt set vertically in a dike of orange-red clay covered on the outside of the structure by about 91 cm. of drift soil. Along the outside of the columns at the point at which they were embedded in the clay lay horizontal sections of columns, 1.2 to 2.1 m. long, apparently serving as buttresses or supports. In one place two such braces were placed one on top of the other. There were 12 columns across the north side, 12 down the west side. Only 10 were found on the south. The east row was not completely uncovered, but there seemed to be some columns missing. The structure (not counting the horizontal braces or the edges of the clay wall, which were not uncovered) measured 7.16 m. east-west by 6.60 m. north-south, and was very close to rectangular. The smoother broader faces of the stones seemed to be outward, in most cases. The row across the south side was about 60 cm. lower than that across the north. At a point 1.52 m. south of the northeast corner was an east-west row of 13 short lengths of columns, mostly fallen over. These were mostly rather short lengths, and did not have horizontal supports along their bases. The row ended 5.47 m. east of the "bastion," nearly in front of the stile or entryway sectioned by the trench previously described.

As part of the same system, a small (1 m. by 2 m.) cut was put down in the middle of the enclosure. This surprisingly enough revealed the stone fence to enclose a small platform of adobes, or unbaked bricks.[7] Beneath 33 cm. of loose drift soil on the surface, there was a 40.6 cm. cap of orange-red clay. Beneath this was a 223.5 cm. layer consisting of 16 courses of adobes of olive-brown clay laid in orange-red clay "mortar," (pl. 3). The bricks were not fired. They varied in length from 22.8 to 45.6 cm., in width from 17.7 to 25.4 cm., and in thickness from 7.6 to 12.7 cm. The clay mortar between courses varied from 2.5 to 7.6 cm. thick. The trench walls showed clear breaking of joints in the courses, but this is more likely a result of the irregularity of size of the bricks rather than a deliberate attempt to increase the strength of the platform. Under the bricks, on both north and east sides of the trench, were found two small caches of serpentine celts. The cache on the north side consisted of two specimens, that on the east of four. In both cases the objects were enveloped in masses of very hard dark olive-brown clay which contained impressions of straw or grasses. The original ground level was not found, although the trench was continued down another 1.4 m. through a fill of clay, some sand, bits of charcoal, and tiny pellets of sherds.

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[7] Considerably more data were obtained from the excavation of the eastern "bastion" in 1943, concerning the structure of these features.

This platform must have been built to support some structure, or even more likely, a stone monument. It is not improbable that "Stela 1" (which should be classed as a monument, not a stela), or one of the monuments now in Villahermosa formerly stood here. The small Monument 5 still standing in the main enclosure must be on a similar raised platform, or it would be today deeply buried under the layer of drift soil which has filled the areas between structures of the patio.

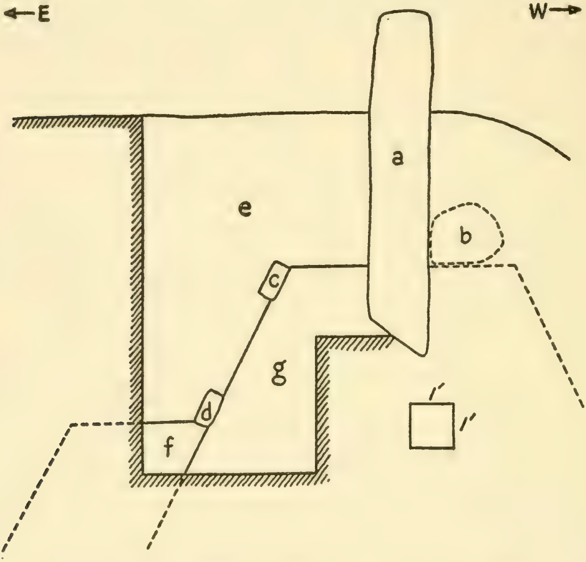

Figure 13.—Trench P–4 west wall (near northwest corner) of A–1.

A small trench, P–4, dug in the northwest corner of A–1, provided some data, augmented by the 1943 work, as to the construction of the "fence" of basalt columns (fig. 13.) The vertical sections were found to be pieces of 1.8 to 2.1 m. long, with their lower ends embedded 15 to 26 cm. deep in a wall or dike of compact orange-red clay whose upper surface lay 106 cm. below the modern driftsoil level. Fifty-five and eight tenths cm. east (inside) of the columns, the clay wall dipped at a steep angle, continuing down below the bottom of the trench. We may presume that the wall had a similar profile on the outer side, and more than likely a row of horizontal lengths of columns to brace the vertical ones more firmly, as in the case of the western rectangle ("bastion").

On the inside at the edge of the clay wall was a horizontal row of very neatly squared basalt blocks laid end to end, and inclined slightly to rest firmly against the slanting face of the wall. These blocks averaged 50.8 cm. long, 22.8 cm. wide, and 11.4 cm. in thickness. There were seven of them in the trench. At a point 1.9 m. below present ground level were three serpentine blocks, somewhat larger in size and placed similarly with regard to the wall except that their ends did not touch. Just below them was the clearly marked line of a horizontal layer of orange-red clayey soil, probably fill forming an enlargement, or a sort of step or platform along the inside of the wall. All these features with the exception of the rows of basalt and serpentine blocks were found repeated in a short extension of the trench which followed around the corner along the east-west section of the fence.

STRUCTURAL INVESTIGATIONS IN 1943

By Waldo R. Wedel

The excavations at La Venta in 1943 were carried on principally in that section of the site lying just north of the Great Mound, in what has been designated Complex A (see sketch map, fig. 14). As Drucker has pointed out, most of the archeological features here appeared to be definitely oriented along a line bisecting the summit of the Great Mound and running northward through the Ceremonial Court and across Mound A–2. Since a general description of the site, including the portion under consideration here, has already been presented, further remarks need be added at this point only in amplification of certain surface features very briefly noted by Drucker. These were clearly seen only after the rank jungle growth between the base of the Great Mound and the Ceremonial Court was entirely removed in preparation for our investigations.

Lying on the north-south axis of the site and centering at a point some 32 m. south of the Ceremonial Court was a low inconspicuous mound from 1.5 to 2.5 m. high—depending on the angle from which it was viewed—by some 30 m. in diameter. This feature was designated Mound A–3; further details concerning it and its contents are presented elsewhere in the present section.

Mound A–3 was flanked on the east and west by two low linear embankments. These averaged approximately 15 to 18 m. in width, and were perhaps 1 m. high at their north ends; to the south, they merged into the basal platform of the Great Mound. On the north, they approached within 10 or 12 m. of the southeast and southwest corners of the Ceremonial Court, from which they were separated, as from Mound A–3, by shallow swales. The north-south midline of each of these structures, projected northward, coincided approximately with the rows of upright basalt columns marking the east and west sides of the Ceremonial Court. An unworked basalt boulder lay at the north end of the west embankment; otherwise, there was no surface evidence of monuments or other stonework that might once have been in any way associated with either. The results of a test trench dug by us through the north end of the east embankment, A–4, are set forth elsewhere in this section.

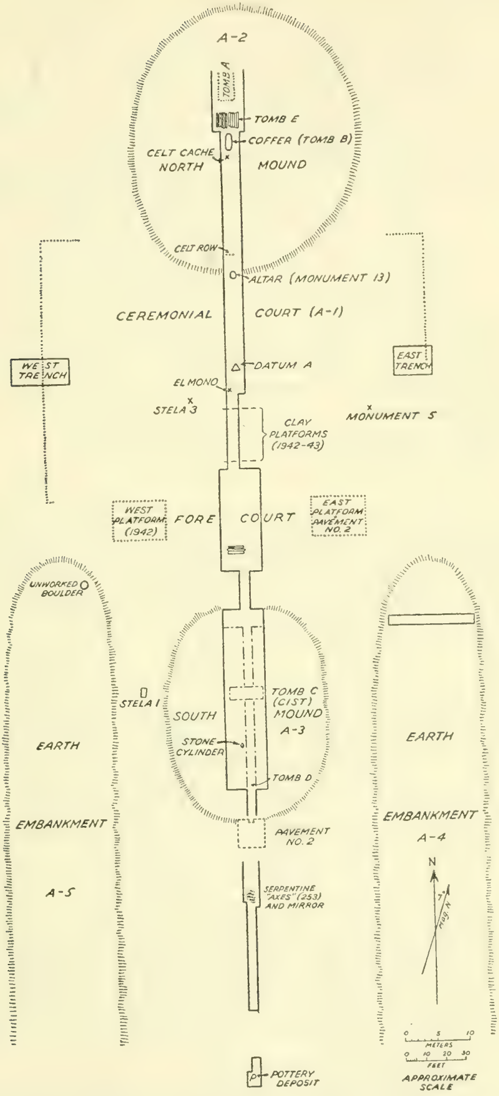
A-2
TOMB A
TOMB E
COFFER (TOMB B)
CELT CACHE
NORTH
MOUND
CELT ROW
ALTAR (MONUMENT 13)
CEREMONIAL
COURT (A-1)
WEST TRENCH
EAST TRENCH
DATUM A
EL MONO
STELA 3
MONUMENT 5
CLAY PLATFORMS (1942-43)
WEST PLATFORM (1942)
FORE
COURT
EAST PLATFORM PAVEMENT NO. 2
UNWORKED BOULDER
STELA 1
SOUTH
TOMB C (CIST)
MOUND
A-3
STONE CYLINDER
TOMB D
EARTH
EMBANKMENT
A-5
PAVEMENT NO. 2
SERPENTINE "AXES" (253) AND MIRROR
EARTH
EMBANKMENT
A-4
N
7°
Mag. N
0 5 10
METERS
0 10 20 30
FEET
APPROXIMATE SCALE
P
POTTERY DEPOSIT

Figure 14.—Sketch map showing principal known archeological features in Complex A, La Venta.

Our excavations in 1943 consisted of a series of connected trenches directed basically at further study of features on and near the north–south axis line bisecting Complex A. From the base of the Great Mound, this main trench system ran northward about 150 m. to end in Drucker's 1942 cuts in Mound A–2. Our cut varied greatly in width and depth, depending on what it disclosed here and there in the way of subsurface features that seemed to call for further investigation. From south to north, it bisected Mound A–3, the Ceremonial Court, and the south half of Mound A–2. In addition, we made smaller cuts at each end of the Court, in search of further information on the construction of the columned enclosure; briefly investigated certain structural features at the southeast corner of the Court; cleared the small columned platform near the southeast corner of the Court; and test trenched the north end of the east embankment, A–4. Such was the size and complexity of the area and its various subsurface features that, despite the employment of a labor force substantially larger than was at Drucker's disposal in 1942,[8] we left unanswered far more problems than we finally settled.

EXCAVATIONS IN AREA A–1 (CEREMONIAL COURT)

The Ceremonial Court designated as A–1 was a rectangular area partially outlined by a stockade of more or less upright basalt columns.[9] The area thus defined was, by my measurements, approximately 58 by 40 m., with the longer dimension lying at right angles to the north-south line that bisects virtually all of the principal features of Complex A. Some of the columns had slipped out of position or were leaning badly, so that precise measurements were not possible, which perhaps accounts for the slight discrepancy between my figures and those given by Drucker (supra, p. 22). Along the west side, beginning at the southwest corner, 53 columns were visible above ground; then came a gap of about 8 m. where no columns were evident, followed by another series of 12 and a corner column. From this, the northwest corner, 12 columns could be counted in a continuous row extending eastward. From the northeast corner, going west, another series of

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[8] Our working force consisted of 18 to 20 men; the digging began on February 6 and ended on April 28, 1943.

[9] These columns, whose use for various purposes constitutes one of La Venta's outstanding archeological characteristics, merit further brief comment. They are of columnar basalt, roughly pentagonal or hexagonal in cross section, with the ends usually more or less rounded off; commonly, one surface is slightly wider, flatter, and smoother than the others. Their size varies; average diameter probably approximates 30 to 45 cm. while the length of unbroken columns ranges from 2 to 3.5 m. Their calculated weight varies between 1,500 and 2,300 pounds each.

Stirling (1943 a, p. 50) notes that the nearest known occurrence of volcanic rock is in the region of San Martín Pajapan volcano, about 60 miles in an airline to the north, and suggests that the columns and other massive carved stone blocks at La Venta, some exceeding 25 tons in weight, were probably transported by raft to the island.

12 or 13 columns was visible. None could be seen throughout most of the extent of the north wall line of the Court, that is, between the two short series running east from the northwest corner and west from the northeast corner. Proceeding southward from the northeast corner along the east wall of the Court, there were 34 visible columns plus gaps that would accommodate perhaps three to six more. Here the row ended; limited tests along the line which should have been marked by columns yelded only negative results. No stones could be found at or near the point where the southeast corner of the Court should have been, or westward from that point along what was evidently the south side of the Court area.

Approximately 10 m. west from the calculated southeast corner of the Ceremonial Court, a columned platform projected southward from the wall line of the Court. Rectangular in plan, this structure measured approximately 8 m. east-west by 6.5 m., corresponding in size, shape, and position to another similar platform excavated in 1942 by Drucker near the southwest corner of the Court (supra, p. 31, excavation P–3). The results of our investigations in the East Platform, which turned out to be unexpectedly complicated, will be detailed elsewhere.

About midway between the two platforms just noted, and slightly to the north just within the south wall line of the Ceremonial Court, was another low elevation. It lay directly on the line from the crest of the north mound, A–2, to the top of the Great Mound. Most of this feature, scene of Drucker's Trench P–2, had been removed before the 1943 work began, but our main profile trench through the Court cut its west side.

Profile Trench, Area A–1.—Of our north-south profile trench along the major axis of Complex A, some 40 meters lay within the area designated as the Ceremonial Court. The approximate center of this particular area had been computed from the crossed diagonals connecting the four corners of the Ceremonial Court, and this point we may designate as Datum A. From a point 4 m. south of Datum A northward 24 m. to where our trench crossed a line connecting the northeast and northwest corners of the Court, the trench had a width of 3 m. Southward from this section, it narrowed to 1.5 m. for a distance of about 12 m. where it again widened to 6 m. for the remainder of its length within the Court area. The floor of the trench was at a more or less uniform level throughout; but owing to the irregularities of the ground surface, depth of the trench varied from about 2.7 m. in the central portion of the Court to 3.3 m. or slightly more at either end.

Throughout approximately 16 m. of its length within the Court, beginning 3 m. south of Datum A (pl. 4, *a*), the upper portions of the trench walls consisted of 1.2 to 1.5 m. of soft gray sand, very easy to handle with shovel or trowel. This sand graded downward into tougher, somewhat irregular, clay deposit. Below this, at a depth of about 1.6 m. beneath ground surface, was an even, almost level, band of finely layered red, yellow, green, and purple sandy clays—approximately dubbed "tierra bonita" by our workmen. This band averaged 10 to 12 cm. in thickness and showed a good many breaks; but, as will become apparent in the next pages, it seems to have covered much or most of the area within the Court. Beneath it, was a massive clay formation, dark red in its upper portions, but soon becoming a mottled yellow, and throughout of exceedingly tough composition. Only at the north edge of the Court area, where our trench reached a depth of just over 3.3 m., and again at the south edge, at approximately 3 m., did we succeed in penetrating through this clay bed to find what appeared to be clean sand underneath. There is no doubt whatever that the clay formation had been carried in and deposited over most or all of the Court area, and was throughout a man-made feature of the site.

A number of artifacts came to light during excavation of this section of trench. The first were a series of small covered pottery vessels, all in the lower portion of the soft upper sands, and north of Datum A. Several of these were uncovered and removed by the workmen during our absence from the dig, and there are for them no precise provenience data. Subsequently, three or four others were found, under circumstances said by our native foreman and other workmen to parallel those of the earlier finds.

Of the occurrences we observed, the first consisted of two medium-sized cylindrical flat-bottomed plainware vessels standing side by side; over each was inverted a shallow flat-bottomed saucerlike bowl with flared walls (pl. 5, *a*). South of this pair, 2.7 m. distant and at the same level, 1.1 m. below ground surface, was another cylindrical vessel, this one encircled by an incised line just above its base. A few small sherds scattered about nearby may have been from a covering bowl. Three meters north and about one meter west of the pair first noted above, according to the foreman, were sherds from a fourth cylindrical vessel and, apparently, a covering bowl. All of these finds were well above the local base of the upper gray sands.

South of this pottery area, directly under Datum A and perhaps marking the center of the Court, lay two plain limestone slabs. Lying 1.4 m. below ground surface, they covered an area 45 by 65 cm. across. Two larger slabs, covering an area 72 by 110 cm., were found 2.4 m. to the south; they were at the same depth below surface but, owing to a rising ground surface, lay about 20 cm. above the first two. Three and a half meters south of the slabs below Datum A, and 1.4 m. to the west, lay a well-made monkey statue of serpentine, elsewhere described by Drucker as Monument 12 (see infra, p. 179 and pls. 5, *c*, and 62). It, too, was in the upper sand; but whether it had been associated originally with one of the two small slab areas nearby to the north, as just described, with a stepped clay platform complex just to the south, or with neither, we have at present no way of knowing.

It is possible that the carved altar subsequently designated by Drucker as Monument 13, which was found in the upper sand some 14 meters north of Datum A and about 6 meters inside the north wall line of the Ceremonial Court (pls. 4, *a*, and 63), also belonged to the archeological or ceremonial complex represented by the materials just described from the upper sand. It rested, actually, on the red clay core sloping southward from Mound A–2; and so I have chosen to discuss it in connection with that section of our workings.

Other artifacts came to light during the slow process of removing the tough mottled clay which underlay the upper sand. About midway between Datum A and the north wall line of the Court, from the clay formation between 1.5 and 2.5 m. underground, came a dozen or so celts of serpentine. These were scattered about at various depths and lay at all angles, in no way suggesting an orderly cache deposit. For the most part, the specimens themselves were rather crudely shaped and of inferior workmanship.

Also in this general area, 5 m. north of Datum A and at depth of 2.85 m. underground, was another cylindrical flat-bottomed clay vessel over which had been inverted another shallower vessel (pl. 4, *b*). These were in a small pocket of soft gray sand entirely surrounded and covered by more than 1 m. of mottled clay. So far as we could determine, this find corresponded in all particulars to the several covered pots previously found more than 1 m. higher up, in the upper sand.

Seventeen meters north of Datum A, and perhaps 3 m. south of the north wall line of the Court, a series of six serpentine celts came to light. They had been set upright, blades down, with edges touching so as to form an east-west row 50 cm. long (pl. 5, *b*). Standing in the mottled yellow clay at a depth of 2.5 m. underground, this row intersected transversely the north-south axis line of Complex A. Here, again, the objects were not especially well made or carefully shaped, and there was a good deal of variation in their size and proportions. Like the vast majority of celts found during the 1943 excavations, these would have functioned poorly as utilitarian tools.

Clay platforms, A–1.—Six meters south of Datum A, the ground surface rose some 40 or 50 cm. Here, also, our central profile trench revealed a rather abrupt thinning of the upper gray sands to about 60 cm., and a corresponding rise in the surface of the clay underlying the sand. Our trench in this section was under 2 m. wide, and was separated by less than 50 cm. from the west edge of Drucker's 1942 Trench P–2 in a series of clay platforms. These platforms were rather well shown in the west wall of our trench, which here reached a maximum depth of 3.1 m. Unfortunately, at this depth we were nearly 30 cm. below the clay composing the platforms and into a soft gray underlying sand. When this sand dried out under the narrow but heavy clay wall separating our trench from Drucker's earlier one, it crumbled and brought down the entire east face of our profile trench through the platforms. Only at the south end of the section were we able to get the various soil formations from bottom to top of our cut.

The lowest soil formation thus revealed was a soft black sand, exposed to a depth of 45 cm. in our trench and continuing to an undetermined depth below our cut. Above this was a band of thin varicolored, but predominantly pinkish, buff, and white sandy clay layers totalling 20 cm. in thickness. This disappeared beneath the caved-in dirt, and no trace of it could be found beyond to the north. Above this was a massive mottled reddish and white clay that attained a maximum thickness of 1.28 m. The top of this clay was marked by a thin but readily distinguishable band of gray sandy clay traceable horizontally for 6.1 m. At the south end, this band fell away in a series of three nearly vertical steps which measured 55, 40, and 22 cm. high in descending order. At the north end, a single step 60 cm. high was visible. The middle step (fig. 15, A′) at the south and the single step (fig. 15, A″) on the north were strongly marked by innumerable hair-line thicknesses of brightly colored red, purple, olive-green, and other pigments, each backed by slightly thicker whitish sandy clays. These striped formations attained a total thickness of 10 to 15 cm.; they were thickest, of course, on the horizontal surfaces or treads, but evidently had once continued vertically up the front of each riser as well. I would suppose that the whitish sandy clay backings may represent layers of plaster, now much softened by weathering, and the colored seams are the remnants of successive coats of paint with which the stepped platform was freshened up from time to time by its users.

Above the flat top of this structure were some 30 cm. of yellow sand (at the south end) and heavy mottled clay (at the north). There was some evidence of horizontal bedding in the yellow sand, suggesting periodic heightening of the platform. None of these bedding lines, however, was very pronounced.

Overlying the yellow sand and clay, 30 cm. above the platform, was a black carbonaceous stratum 5 cm. thick, evidently the result of burning. In its horizontal extent, this coincided almost exactly with the lower platform surface. Thirty centimeters beyond its south end,

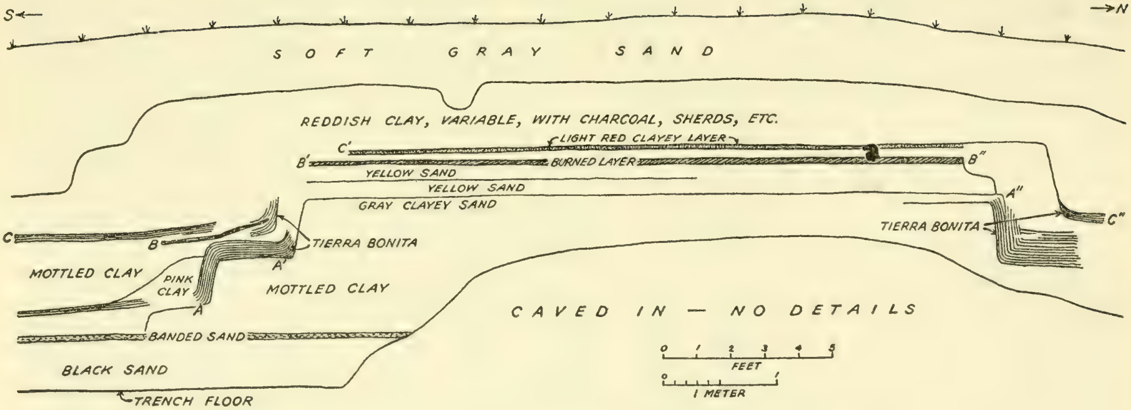
S←
→N
SOFT GRAY SAND
REDDISH CLAY, VARIABLE, WITH CHARCOAL, SHERDS, ETC.
LIGHT RED CLAYEY LAYER
C'
B'
BURNED LAYER
B"
YELLOW SAND
YELLOW SAND
GRAY CLAYEY SAND
A"
TIERRA BONITA
C"
C
B
TIERRA BONITA
A'
MOTTLED CLAY
PINK CLAY
MOTTLED CLAY
A
CAVED IN — NO DETAILS
BANDED SAND
BLACK SAND
TRENCH FLOOR
0 1 2 3 4 5
FEET
0 1
1 METER

Figure 15.—Section through clay platforms in Ceremonial Court, A-1. (See also p. 29).

and beginning at a point some 50 cm. below, was what appeared to be a continuation of this burned stratum; it began in the midst of a band of finely bedded colored earths which soon curved sharply upward, and ran out 60 cm. away beneath a more or less horizontal band of similar colored materials. There was inconclusive evidence of a step-like arrangement at the north end. All of this, indicated by BB′B″ in figure 15, rather suggests the remnants of another stepped clay platform overlying and perhaps completely covering that represented by AA′A″.

The burned layer just discussed at B′B″ was covered with 15 cm. of gray sand capped by a well-defined 5-cm. band of light reddish clay (fig. 15, C′). This had about the same horizontal extent as the two preceding platform surfaces, being traceable for some 6.37 m. north to south. It ran northward 38 cm. beyond the lowest, A′A″. Here, just 6 m. south of Datum A, there was a steep drop of 65 to 70 cm., marked by a thin yellow line which flattened out into a horizontal band of thin yellow, white, and purplish soil layers (fig. 15, C″). This band, the uppermost and latest of the several marking successive platform fronts, connected with the "tierra bonita" previously described as extending northward across the Ceremonial Court at ca. 1.6 m. depth and underlying the upper sand.

To the south, this topmost platform was more difficult to work out. I suspect that the band of finely bedded colored earths marked by C in figure 15, and running northward just above the burned layer B, corresponds to the similar colored band at C″. It is possible that some of the upturning colored soils at the north end of burned layer B represented the south front of this final and latest platform, in which event the structure at this point would have coincided closely with the immediately preceding platform. There was otherwise nothing in our profile to suggest a step elsewhere in this section.

Overlying the topmost clay-floored platform and its associated colored soils, as indicated by CC′C″ in figure 15, was a rather variable reddish clay containing some bits of charcoal, occasional tiny sherds, and other cultural detritus. Over the platforms this clay averaged some 60 cm. in thickness; on the south above the steps and platform remnants B and C, the red clay reached a maximum depth of 1.2 m. Here, too, directly over the colored band C, there was some evidence that this clay mass fell away in two poorly marked steps to a flat surface some 95 cm. lower (fig. 15). What was evidently a continuation of this lower clay surface was found in our trench to the south, forming a sort of raised forecourt along at least the middle third of the south front of the Ceremonial Court. This feature will be further described elsewhere.

On the north, the red clay sloped downward and merged into a mottled yellowish-white clay layer; there was no suggestion of steps. Overlying the red-clay structure, if such it actually was, was a clean soft gray sand averaging 60 cm. in thickness. This merged evenly into the upper sand, 1 to 1.5 m. thick, found as the upper soil formation in the profile through the Ceremonial Court to the north, and into a somewhat lesser thickness of similar sand covering the area immediately south of the platform complex. The top of this sand, which was also the present ground surface, fell away sharply south of the area included in the platform profile (fig. 15), and two or three meters away, in the forecourt, was less than one meter thick over the level clay surface.

There can be no doubt, I think, that at least three successive stages of platform-building were indicated in our excavations. These are indicated in figure 15 by profiles AA′A″, the earliest; BB′B″, the second; and CC′C″, the third. It is possible there was a fourth one, as suggested by the stepped arrangement of the red clay at the south side, but I am not altogether convinced that this was a structure actually comparable to the earlier, more clearly delineated, ones. If it was, it was certainly erected with less care and effort than were expended in the first three platforms.

It is gratifying to note that our profile through the west edge of the clay platform complex, as described in the foregoing pages, seems to correlate at all major points with the views presented by Drucker on the basis of a test pit into the heart of the structures. I did not see Drucker's manuscript or notes before I went into the field, and our terminologies differ somewhat (cf. figs. 11 and 15). In certain particulars, too, Drucker presents more detail, perhaps in part because of the location of his test in the heart of the platform complex. Nevertheless, the two sets of independent observations can be satisfactorily harmonized.

The "soft gray sand" of my profile is, of course, the somewhat thinner "medium brown sandy soil (drift)" observed by Drucker, and his "orange-red clay" formation (E) is my "reddish clay, variable . . ." Of the structure he indicates at D, I noted no good evidence, unless my C′ surface is a part of it. Unquestionably, Drucker's charcoal layer topping C is identical with my "burned layer" at B′B″; both of us found this distinctive horizon at 1.2 or 1.3 m. below ground surface. What I have designated as a rather well-defined platform surface at A′A″ closely approximates Drucker's line at B; beneath these levels, we both noted mottled clay. I am inclined to believe, also, that the "banded sand" I show at ca. 2.8 m. depth equates with the upper portion of Drucker's "layers of orange buff and white sandy clays" just below his line A. Finally, Drucker's "dark brown humus-stained sand (original surface)" at 3.15 m. clearly is the "black sand" I show at the same depth.

Certain correlations can be made also between the various platforms and the materials found within the Ceremonial Court to the north. The overlying sands are continuous from platform area to all, or nearly all, parts of the Court. The reddish clay next below, shading into a mottled yellowish clay at the north evidently equates in time with a clay that underlies the upper sand and overlies the widespread "tierra bonita" stratum. The "tierra bonita" north of the platform complex is certainly to be correlated with the CC′C″ platform; and therefore, of course, all features found above this stratum in the Court area, including Monument 12 and the covered pottery vessels in the upper sand, are probably no earlier than platform CC′C″. They could be from a still later period represented by the red clay platform (?) overlying CC′C″.

The mottled clay which, in the Court area north of the platforms, underlies the "tierra bonita," probably correlates with platform BB′B″, or with AA′A″, or perhaps with both. As shown in figure 15, platform AA′A″ consisted largely of mottled clay separated by a colored band directly overlying a black sand. Mottled clay also appeared under circumstances suggesting that it partly underlay, and thus partly preceded, platform BB′B″. The numerous serpentine celts we found scattered through the tough clay north of Datum A, and probably also the single covered pottery vessel found in the same formation, might then correlate roughly with platform AA′A″ and/or BB′B″. The row of celts (pl. 5, *b*) 17 m. north of Datum A, at slightly over 2.5 m. depth, probably would also correlate with one of these earlier structures.

East Trench, A–1.—As noted above, the east side of the Ceremonial Court was partially defined above ground by a row of 34 upright basalt columns, with occasional gaps in the series that would have accommodated from 3 to 6 more. These began at the northeast corner and ran due south for 19 m., from which point no more columns were visible. In search of some explanation for this abrupt ending of the row halfway between the northeast and presumed southeast corners of the Court, and in an effort to learn something of the nature of construction of the wall, we sank a test trench 4.5 m. wide, starting 1 m. outside the wall line and running 6 m. west into the Court. Owing to the loose character of the soil to a depth of nearly 1.5 m., it was necessary to reduce the area of our test trench as its depth increased. This reduction resulted finally in a test pit 1.5 by 2.4 m., which reached a total depth of 3.95 m. beneath ground surface.

The soil formations revealed in this trench parallel in general those found elsewhere in our tests and trenches in the Court area. The upper 1.5 m. consisted of a loose gray drift sand, fairly dark with humus at the surface but becoming lighter with increasing depth. In the lower part of this sand zone and roughly 1 m. inside the line (projected) of the stone columns was a disorderly mass of small rectangular dressed stone blocks. There was nothing to show how these had originally been placed; but from analogy with the west wall, to be discussed next, it may be presumed that they had once been a row of blocks set on edge against a clay or brick embankment and facing inward toward the Ceremonial Court.

Below the upper sand, at 1.5 m. depth, was a 10-cm. stratum of thin reddish, brown, and yellow sandy clay layers—evidently the "tierra bonita" of our main trench across the Court. This was underlain by 50 cm. of reddish and brownish sandy soils, from which the fine even bedding lines of the "tierra bonita" were entirely absent. Below this was another 15-cm. stratum of "tierra bonita"—well-marked red, brown, white, and dark seams that apparently pinched out and presumably disappeared a short distance east of our deepest test at this spot.

The lower "tierra bonita" was underlain by a 50-cm. thickness of variegated sandy soils, predominantly reddish-brown, with very faint suggestions of bedding lines. Below this came 80 cm. of alternate red-brown and light-colored lenses and pockets of fine-textured sands. These strongly contrasting pockets and lenses suggested loading, similar to that noted occasionally elsewhere in our diggings.

Beneath the lensed soils was a gray clayey sand, finely mottled with red streaks and blotches. Owing to relatively higher clay content, this formation was much tougher than any of the overlying ones. Its depth was not determined, since at the time we were inclined to suppose this might represent bottom. In light of subsequent findings elsewhere, I am now doubtful that it actually did mean this.

This test trench unfortunately gave us little real information on wall construction, partly because of complete absence of any columns and partly because of the very restricted size of our cut. In light of our more extensive and definitive test in the opposite wall, I doubt that further work on the East Trench would have been justified. The complete absence of any columns and the disorderly manner of occurrence of the rectangular blocks encountered in the upper sands suggest that the Court wall here had been broken down by the Indians themselves and that anything like an accurate reconstruction would have been out of the question for us.

Other than the shaped stone blocks mentioned, no artifacts came to light in this trench.

West Trench, A–1.—Further details regarding construction of the walls of the Ceremonial Court were obtained from a trench across the west side, directly opposite the East Trench just described (pl. 6 and fig. 16). The West Trench measured 4 m. in width by 9 m. in length, the long axis running east-west and centering on the line of visible basalt columns. At its east end, inside the Court, this trench reached a depth of 5 m.; but in the interests of safety for our workmen, we had to reduce its area here to a 2.5 m. square. At the west end, outside the Court, the test reached a depth of 4.2 m. We did not attempt removal of the row of columns, and had learned from hard experience that their great weight called for a fairly substantial base. An unexcavated block 2.5 m. thick, along the center of which stood the columns,

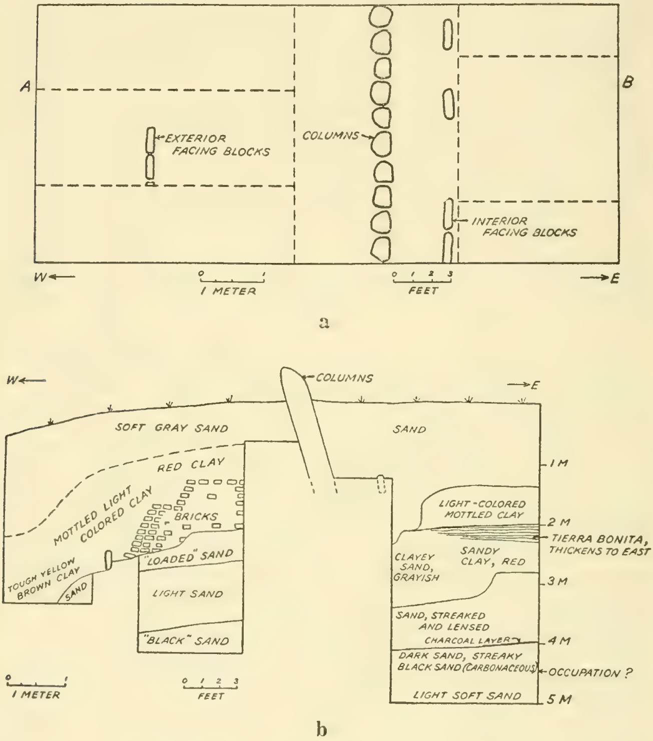
A
B
EXTERIOR FACING BLOCKS
COLUMNS
INTERIOR FACING BLOCKS
W
E
0 1
1 METER
0 1 2 3
FEET
a
W
COLUMNS
E
SOFT GRAY SAND
SAND
RED CLAY
MOTTLED LIGHT COLORED CLAY
BRICKS
"LOADED" SAND
TOUGH YELLOW BROWN CLAY
SAND
LIGHT SAND
"BLACK" SAND
1 M
LIGHT-COLORED MOTTLED CLAY
2 M
TIERRA BONITA, THICKENS TO EAST
CLAYEY SAND, GRAYISH
SANDY CLAY, RED
3 M
SAND, STREAKED AND LENSED
CHARCOAL LAYER
4 M
DARK SAND, STREAKY BLACK SAND (CARBONACEOUS)
OCCUPATION ?
LIGHT SOFT SAND
5 M
0 1
1 METER
0 1 2 3
FEET
b

FIGURE 16.—*a*, Plan of West Trench. *b*, Section through west wall of Ceremonial Court, A–1; exterior of Court wall is to left.

was therefore left between the inner and outer pits of this trench (fig. 16).

Considering first the findings on the inner, or Court, end of the trench, the uppermost formation revealed was again a soft gray sand—the same that showed up elsewhere in our excavations in and about the Court. Where this formation came into our West Trench, it had a thickness of about 1.3 m. At 1.5 m. from the row of columns, its lower margin dipped sharply to about 2.3 m. depth which level, if maintained westward into the block we did not excavate, would presumably have run just under the probable base of the columns. Actually, this thickening sand formation ended abruptly against a clay bench. This showed a flat upper surface 1.25 m. below ground level, extending 1 m. east from the row of columns, and then dropping away in a nearly vertical front facing into the Court. Set into the upper edge of the clay front were four shaped rectangular stone blocks forming a sort of facing band apparently similar to that uncovered by Drucker (supra, p. 32, and figure 13, *c*) in the inside northwest corner of the Court. The blocks we uncovered, averaging about 40 to 50 cm. long, 20 cm. wide, and 8 to 10 cm. thick, were without much doubt the remnants of a once continuous row that faced inward on the Court. Above the level of this band was only soft gray sand; beneath and behind, to the row of columns, was a tough clay. We found no evidence of the second and lower series of blocks reported by Drucker on the inside face of the wall.

Below the soft gray upper sand, between 1.3 and 2 m. depth, was a light-colored mottled clay, underlain in turn by a band of "tierra bonita" which seemed to thicken where it passed eastward out of our trench. This band presumably connects with the traces of similar material underlying the upper sands along our main north-south trench through the Court. It is at, or very near, the level at which Drucker (supra, p. 32) reported "a sort of step or platform along the inside of the wall" in the northwest corner.

Below the "tierra bonita" was a sandy reddish clay that changed to a gray color and showed progressively more clay content westward to the unexcavated block. Its lower contact was uneven, and the thickness of the zone varied from about 60 cm. on the east to nearly 110 cm. on the west. It is tempting to regard this as the west edge of the massive mottled clay that formed the lower part of our main trench walls in the north half of the Ceremonial Court; but further excavation between our West Trench and the main trench across the Court would be needed to prove or disprove this point. So far as stratigraphic position is concerned, the material is at any rate analogous to, if not identical with, the mottled clay.

Under the clay just noted, our excavation disclosed only a series of variable sand formations. The first of these, lying between 3- and 4-m.

depth, was streaked and somewhat lensed, in places suggesting loading. At 4 m. there was a thin seam of charcoal such as might have resulted from the incomplete burning of brush; and there was evidence that the surface on which this burning had taken place extended beyond the limits of our trench in all directions. Below this, the sand was again dark and streaky, apparently with a high carbon content. At 5 m., bottom of our trench, only light soft clean sand was visible; its depth was not ascertained.

Other than the changing soil formations, some of which certainly correlate with native uses of the Court area, the only evidence of purposeful construction in this part of the West Trench was the clay bench fronting the row of columns and the four rectangular blocks set into its upper inner edge.

On the outside of the Court wall, there was evidence of a rather more involved structure (fig. 16, *b*). The uppermost soil formation was again the soft gray sand, some 60 cm. deep against the columns and deepening to 1.6 m. at a distance of four or five meters outside. Beneath this, near the columns, was a reddish clay layer 50 to 60 cm. thick, which sloped downward toward the west into a mottled light-colored clay.

Underlying the reddish clay was a sort of platform or rampart of sun-dried brick. The uppermost course of bricks, 1.25 m. below ground surface, was on a level with the stone facing blocks on the inside of the Court wall. At a point 2.25 m. from the columns, the brickwork fell away sharply for 50 cm., where there was a ledge 40 to 50 cm. wide. Below the ledge, other brickwork amounting to eight or nine courses, formed another steep slope of 75 cm. vertical height. Below, and 25 cm. outside the lower toe of this platform, were several stone facing blocks that were evidently the remnants of a horizontal band corresponding in appearance to that found on the inner side of the wall. This outer band lay 1.25 m. lower than the inner, and very nearly on a level with the contact between sandy red clay and the streaked sand inside the Court wall. No traces of this band were reported by Drucker in his excavations at the northwest corner of the Court.

Beneath the brickwork came a series of sand formations. Uppermost was a lensed sand, alternately dark and light in color, that rather strongly suggested loading; it averaged some 25 to 30 cm. thick. Below this was a 1-m. depth of light gray fairly clean sand, in turn underlain by 30 to 50 cm. of very dark gray sand. As will be apparent from figure 16, the soil formations on the outside do not exactly correspond with those on the inside; but there are unconformities both inside and out that look suspiciously like related surfaces. Unfortunately, the unexcavated block separating the two deeper ends of our trench still holds the final answer to the question of soil correlations here.

I am inclined to suspect that the original ground surface on which the Ceremonial Court was started, was somewhere in or on one of the lower sandy formations, not less than three or four meters beneath the present ground surface. All soils found east of the wall to 3-m. depth can be tentatively, but plausibly, correlated with one or another of the several horizons exposed in our main trench across the Court. Whether the black sand at about 4 m. in the West Trench is the same as the black sand underlying the stepped platform complex (see p. 40) I cannot say from the evidence at hand.

The "loaded" sand on the outside of the wall at 2- to 2.75-m. depth suggests a capping on a prepared sand base erected to carry the main wall. Above it was a substantial platform of sun-dried brick, at least 1.5 m. thick and of an uncertain breadth that certainly did not exceed 4 m. This brick platform, fronted on the west by a horizontal band of shaped stone blocks set on edge, was stepped on its west face and seems to have had a flat top. Whether this flat top was left so when the Court was in use, I have no way of knowing; it seems possible the red clay was added to the outside of the wall to give greater support to the columns, and that the brickwork was entirely concealed. On the other hand, the clay that covered the bricks also covered the rows of stone blocks, which were almost certainly ornamental rather than utilitarian. My guess is that the brick rampart and its rows of inner and outer facing blocks, like the upper 1 to 1.5 m. of the upright columns, were fully visible at the time they were in active use. The lower ends of the columns, though nowhere uncovered in the West Trench, were inferentially on or near the level of the base of the observable brickwork, and were presumably bedded in massive clay rather than in brickwork. As indicated in figure 16, upper, the basalt columns had been set with their flattest and smoothest surfaces facing inward onto the Ceremonial Court (pl. 6, *b*). We found no evidence of horizontal bracing columns against the outside bases of the uprights. The total width of the wall at its base was between 4.5 and 5 m.; its height, from the top of the columns down to the base of the brickwork, was probably in the neighborhood of 3.5 m.

It may be noted in passing that the West Trench yielded no artifacts of pottery, stone, or other materials, other than the items already mentioned as actually forming a part of the wall itself.

East Platform, A–1.—The East Platform, as noted above, was a rectangular column-enclosed structure projecting southward from the wall line of the Ceremonial Court about 10 m. from its southeast corner. Like the apparently similar structure excavated in 1942 by Drucker near the southwest corner, as Trench P–3, the East Platform was surrounded by incomplete rows of more or less upright basalt columns, and measured roughly 6.5 by 8 m.

The entire East Platform was isolated by trenches 1 to 1.5 m. wide by approximately 2 m. in depth; greater depth would have been desirable, but was not feasible because of the risk of collapse of the enclosing columns. These trenches, nevertheless, afforded a fairly adequate idea as to the exterior appearance of the structure. It consisted of originally vertical basalt columns, averaging 2.25 to 2.75 m. in length, which had been set closely side by side to enclose an area measuring 6.3 by 7.8 m., the longer dimension being east-west. The north and south sides each included 16 columns; the shorter east and west sides consisted of 12 and 14, respectively. They stood apparently in or on a clay embankment, and were secured in an upright position by means of horizontal columns laid against them at a height of about one meter above their bases. There were three of these horizontal bracers on the north and south sides, and two on the east and west sides.

Owing to the badly tumbled condition of the south and west sides, no further details could be learned regarding their construction below the horizontal bracers. On the east and north sides, however, further excavation showed that the horizontal columns lay on a clay bench ca. 50 to 70 cm. wide. Against the outer upper edge of the bench, set into the clay along the east side, was a row of 13 rectangular basalt blocks. These averaged 25 to 45 cm. in length, 22 to 24 cm. wide, and about 10 cm. thick. They were set on edge, with the long axis horizontal and the ends touching, so as to form a continuous band along the edge of the clay bench. On the east side, there was some suggestion that these blocks rose slightly from south to north, as if they had been set in a series of terraces (pl. 7, *a*); but this appearance may have been a result of slumping of some of the blocks.

The bands of facing blocks on the east and north sides intersected at the northeast corner of the platform. Those on the north wall, averaging uniformly 45 cm. in length, were rather badly disarranged; but enough remained in place to show their probable original arrangement. It soon became evident, too, that this band of facers was not the only feature here. Lying against the base of the row was a line of smaller stones, less carefully shaped and finished but each having one flat surface, which was turned downward. These secondary blocks were all under 30 cm. long, 15 to 20 cm. wide, and 8 to 10 cm. thick. Not many of these remained in place, but it can be safely inferred, I think, that they had once formed a narrow stone benchlike structure all along the north wall of the platform, facing northward onto the Court area (pl. 7, *b*). They rested on the same clay base as did the vertical facing stones behind them and also the columns.

As already indicated, limitations of time prevented complete excavation of the east, south, and west sides of this platform and a determination of the nature and extent of the clay foundations on which the columns and other stone work rested. Along the north wall, however, we cut a trench to an average depth of 3 m. below ground level, or about 1.5 m. below the presumed bases of the upright columns. This showed (fig. 17) that the tough reddish clay supporting the stonework gave way, not far below the band of facing blocks, to a mottled sandy clay without bedding lines and containing occasional lumps of charcoal, minute fragments of pottery, and other cultural debris. This material continued to the bottom of our trench, which at no point penetrated to the original pre-Court ground surface.

Our trench along the outside north wall of the East Platform also gave some indication of the vertical relationship between the structure and the fill within the Court enclosure. Above the facing blocks, the fill consisted of a loose gray sand about 1.35 m. deep. In the north wall of our trench, this was underlain by 30 cm. of sandy clay, and this in turn by a 15-cm. band of finely layered reddish, brownish, and yellow earths—without much doubt, I think, the "tierra bonita" found at practically the same depth in our main north-south trench across the Court. Beneath this, reading downward, came successively a 60-cm. thickness of heavy mottled clay; a 7-cm. band of varicolored finely layered sands; and then ca. 50 cm. more of the mottled clay. In general, except for the lower band of colored sands, these formations coincided in all respects with those found in our main trench across the Court.

Returning again to the excavations in the East Platform, removal of the fill within the enclosed rectangle revealed (figs. 18, 19; pl. 7, *c*) first a layer of sandy gray humus and topsoil approximately 40 to 45 cm. deep. Beneath this was a layer of reddish clay which also approximated 40 to 45 cm. in thickness over the entire enclosed area, except where it thickened markedly next to the columns on all sides. Apparently, it formed a base or matrix into which the upright columns had been set, and also the bench around the outside on which lay the horizontal bracing columns and at the edge of which were set the small rectangular facing blocks. This judgment is based in part on inference; the weight of the remaining columns and their position were such that at most points we did not excavate all of the supporting and underlying soil.

With increasing depth, the reddish clay became varicolored and streaked or blotchy, and, at a depth of 1 m. below ground surface, this gave way to a structure of sun-dried bricks. These lay in some 12 to 15, or even more, horizontal courses (pl. 8, *a*). The bricks varied a good deal in size and proportions; several that may be regarded

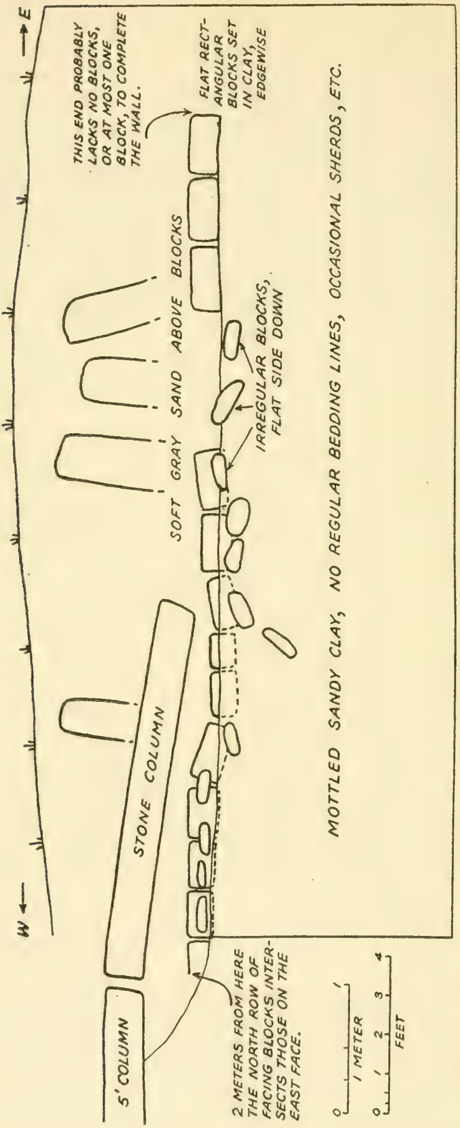
W ←
→ E
THIS END PROBABLY LACKS NO BLOCKS, OR AT MOST ONE BLOCK, TO COMPLETE THE WALL.
FLAT RECTANGULAR BLOCKS SET IN CLAY, EDGEWISE
SOFT GRAY SAND ABOVE BLOCKS
IRREGULAR BLOCKS, FLAT SIDE DOWN
MOTTLED SANDY CLAY, NO REGULAR BEDDING LINES, OCCASIONAL SHERDS, ETC.
STONE COLUMN
5' COLUMN
2 METERS FROM HERE THE NORTH ROW OF FACING BLOCKS INTERSECTS THOSE ON THE EAST FACE.
0
1
1 METER
0
1
2
3
4
FEET

Figure 17.—Profile sketch of north exterior wall of East Platform as seen from inside the Ceremonial Court, A-1. (See also p. 31 and pl. 7, b.)

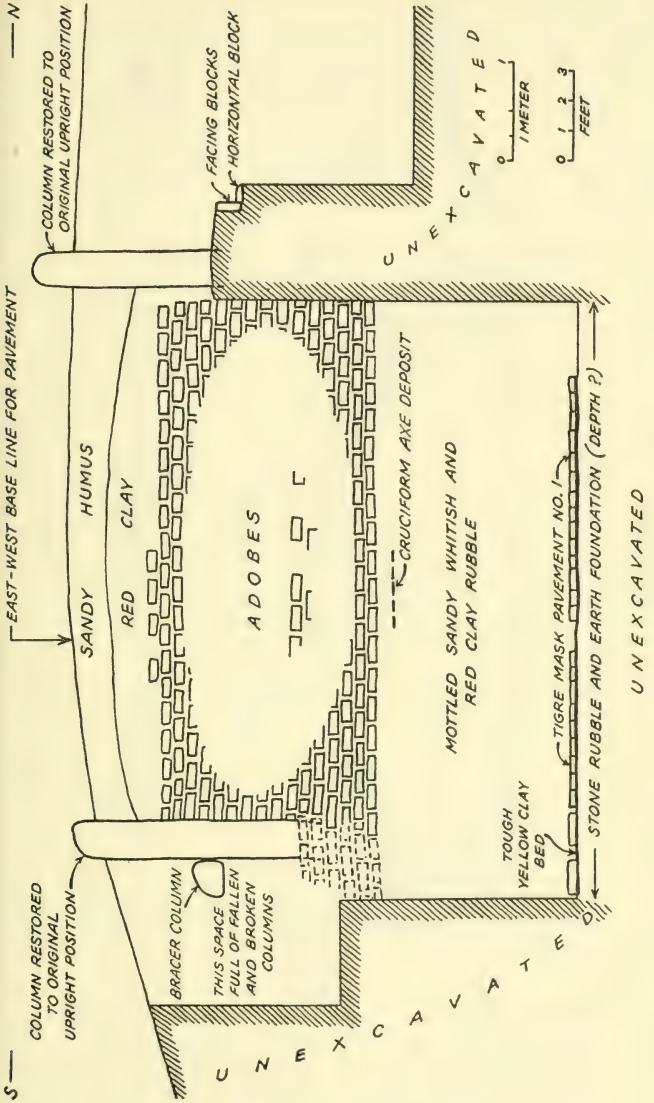
S
N
EAST-WEST BASE LINE FOR PAVEMENT
COLUMN RESTORED TO ORIGINAL UPRIGHT POSITION
COLUMN RESTORED TO ORIGINAL UPRIGHT POSITION
FACING BLOCKS
HORIZONTAL BLOCK
SANDY HUMUS
RED CLAY
ADOBES
BRACER COLUMN
THIS SPACE FULL OF FALLEN AND BROKEN COLUMNS
CRUCIFORM AXE DEPOSIT
MOTTLED SANDY WHITISH AND RED CLAY RUBBLE
TOUGH YELLOW CLAY BED
TIGRE MASK PAVEMENT NO. 1
STONE RUBBLE AND EARTH FOUNDATION (DEPTH ?)
UNEXCAVATED
UNEXCAVATED
UNEXCAVATED
0
1
1 METER
0
1
2
3
FEET

FIGURE 18.—North-south section through East Platform of Ceremonial Court, A-1. (See also p. 31.)

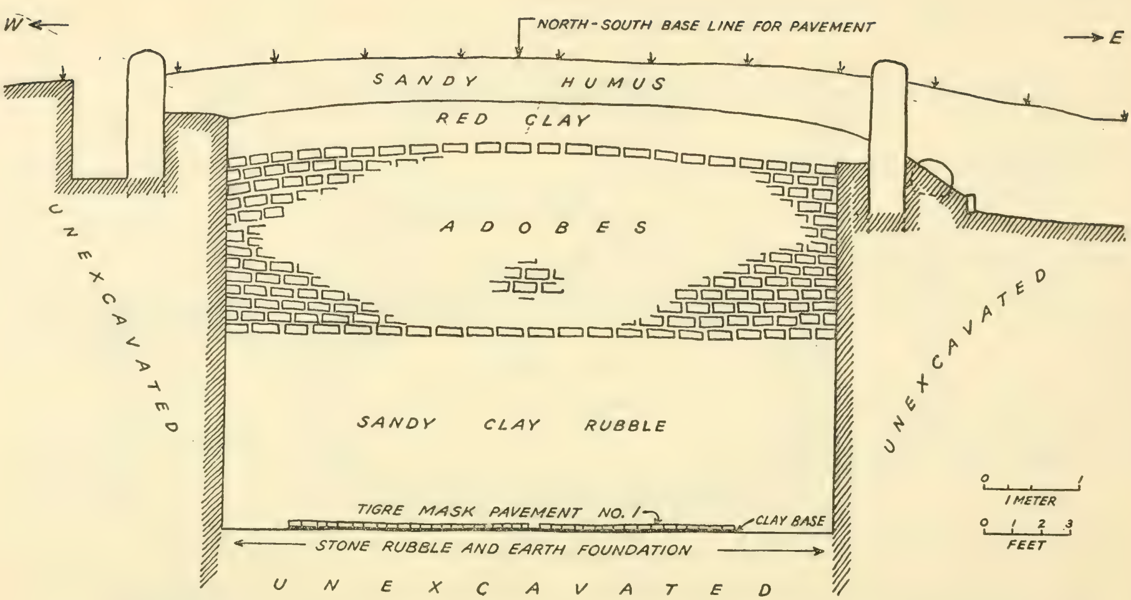
W
E
NORTH-SOUTH BASE LINE FOR PAVEMENT
SANDY HUMUS
RED CLAY
ADOBES
SANDY CLAY RUBBLE
TIGRE MASK PAVEMENT NO. 1
CLAY BASE
STONE RUBBLE AND EARTH FOUNDATION
UNEXCAVATED
UNEXCAVATED
UNEXCAVATED
0 1
1 METER
0 1 2 3
FEET

Figure 19.—East-west section through East Platform of Ceremonial Court, A-1. (See also p. 31.)

as average specimens approximated 35 by 22 by 10 cm. Most were olive-gray to greenish and yellowish in color, and they had been set in a reddish clay; when freshly exposed, they formed a rather striking pattern of colors. They composed a solid mass extending nearly to the columns on all sides, from which, however, they were separated by an apparently brick-free red clay. We were unable to determine with certainty whether the brickwork extended laterally below the columns. I am inclined to doubt that it did; but there is the possibility that more carefully cut sections through the wall than we were able to make would show traces of such a foundation, perhaps somewhat obscured by crushing of the bricks under the great weight of the columns.

The maximum observed thickness of the coursed brickwork totalled approximately 2.25 m. Its lower limit vertically was rather strongly marked, unlike the lateral and upper margins, where the weathering and disintegration of the adobes had largely obscured their extent. Beneath the brickwork, and about three meters below the ground surface, the character of the fill changed abruptly to a light mottled pinkish sand mixed with lumps of dirty whitish clay. The contact between this material and the overlying bricks was horizontal and perfectly even throughout the extent of the platform area (pl. 9).

Some 15 or 20 cm. below the contact plane between bricks and underlying sandy clay rubble, completely enclosed by the latter material, and about 50 cm. west of the center of the column-enclosed area, was a cruciform cache of 20 celts (pl. 8) and other objects. In this arrangement (pl. 8, *b*), the upright of the cross was oriented north–south, with its shortest arm, represented by three celts lying side by side, toward the south. Below these lay two large celts, also side by side and about 20 cm. apart; then came successively three large celts, three smaller ones, a hematite mirror pendant, and finally a single celt. Each of the celts in the upright of the cross was oriented with its long axis north–south, paralleling the axis of the upright. The arms of the cross each consisted of one group of three medium to small celts and a single large one at the end, all these specimens lying with their long axis east–west. The celts were of moderately good workmanship; most were of serpentine, but two or three were of some harder stone, apparently jade. In north–south extent, the cross measured 1.1 m.; in east–west extent, 1.25 m. There was no evidence of a specially prepared bed for the celts.

Between the two large celts, where the upright and horizontal arms of the cross intersected, there was a circular blackened layer, slightly concave, and measuring 17 cm. in diameter. Near its center were traces of charred or oxidized wood that had apparently been covered with reg pigment; the entire area had a curiously fibrous or grainy structure. I presume there had once been a circular wooden plaque here, probably painted with red ochre or cinnabar; but the faint surviving traces offered no clue to its further appearance.

The hematite mirror near the north end of the cross was irregularly oblong in shape, and measured 8.8 by 6.0 by 0.5 cm. Its upper surface had been carefully ground and polished to a shallow concavity with a low flat border. Near one of the longer sides, marked by a broken and unfinished edge, were two small perforations 5 cm. apart.

Beneath the cruciform celt cache, the mottled sandy clay continued to a depth of 1.8 m. more. Here, at a depth of slightly less than 5 m. below ground surface (pl. 9), was the most interesting feature of all—a carefully built pavement of stone blocks representing, apparently, a conventionalized jaguar mask. This, the first of two such constructions uncovered in the 1943 excavations, was designated Pavement No. 1 (pl. 10 and fig. 20).

Pavement No. 1 was within a few centimeters of being perfectly square in outline, its four sides varying in length between 4.63 and 4.7 m. It consisted of 443 blocks of serpentine, each carefully dressed to a square or rectangular form with smoothed upper and nether surfaces. In size they varied from small pieces approximately 12 cm. across to others as much as 30 or 40 cm. in maximum dimension; thickness averaged consistently in the neighborhood of 5 or 6 cm. All of these blocks had apparently been laid in a thin layer of asphalt or pitch, which occurred under and between them. Underlying the asphalt was an exceedingly tough brownish-yellow clay, 5 to 7 cm. thick, below which, in turn, was a compact stone rubble consisting of irregular fragments of serpentine and other rock held together with more clay. This rubble underlay the entire pavement, extending beyond it in all directions to and beyond the edge of our excavations. The stone fragments were so thoroughly compacted and interlocked as to be almost impossible to remove; and we finally gave up our attempts to get through the mass when, 60 cm. below its surface, we found ourselves still in the rubble. Even here it was so compact that a pick could be driven only a few centimeters into it. There is, thus, no way of telling at this time how much deeper the rubble continued; but what we saw represented an extraordinarily solid foundation for the pavement and all that lay above.

The pavement has been described as approximately square in outline, at any rate in its principal section. Basically, it had been constructed as an open square, with three rows of blocks on the west, north, and east sides, and two rows across the south. Almost without exception, the blocks in these rows lay with their long axes north-south. The first row on the north was not complete throughout its length; at its center three or four blocks had been omitted to leave a gap approximately 50 cm. wide. The second row included a central gap also, but this had been partially filled by two blocks laid with their long axes running east–west. The third row, of 32 blocks, was unbroken throughout its length, as were the bordering rows on the east, south, and west sides of the pavement.

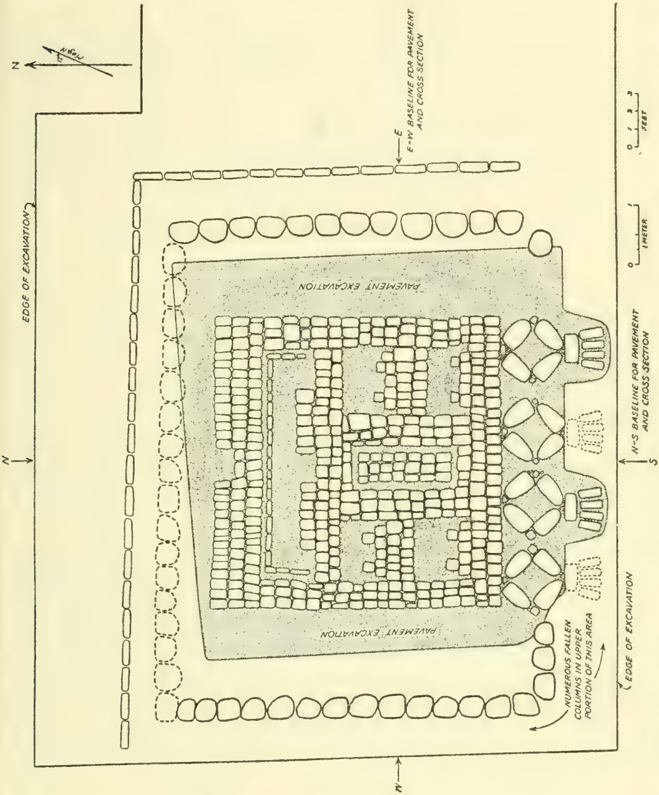
NORTH
N
E-W BASELINE FOR PAVEMENT AND CROSS SECTION
E
EDGE OF EXCAVATION
PAVEMENT EXCAVATION
0 1 2 3 FEET
0 1 METER
N-S BASELINE FOR PAVEMENT AND CROSS SECTION
S
PAVEMENT EXCAVATION
NUMEROUS FALLEN COLUMNS IN UPPER PORTION OF THIS AREA
EDGE OF EXCAVATION
N

FIGURE 20.—Plan of Pavement No. 1, beneath East Platform of Ceremonial Court, A–1, showing relationship to column enclosure and other structural features. (See also pls. 10, 11.)

Within the hollow square thus created, various rows and other groupings of blocks divided the enclosed area into five unpaved sections of varying sizes and shapes. The largest was at the north; it consisted of an open area 3.6 m. east–west by 80 to 85 cm. north–south. Ten cm. inside the west, north, and east sides ran a line of narrow blocks, 7 to 10 cm. wide by 12 to 25 cm. long; there were three blocks each on the east and west sides and 15 along the north. Along the south side were two short rows of fairly large blocks, so spaced as to leave a 45 cm. gap in the middle and somewhat longer gaps between their respective ends and the border blocks. The gap separating these two short rows was due south of the central notch at the north edge of the pavement. South of this space, two solid rows of blocks ran entirely across the square.

The north–south midline of the pavement, as suggested, ran through the notch at the north side and also through the space separating the two short rows of blocks along the south edge of the north unpaved area, just described. In the south half, it ran along the midline of a narrow rectangular paved area 3 blocks, or 50 cm., wide by 7 blocks, 1.45 m., long in the north–south direction. This rectangle was surrounded by a narrow unpaved border averaging 12 to 15 cm. wide. Three rows of blocks running north–south on each side separated this panel and its border from other unpaved areas to east and west.

These latter areas, one in the southeast quarter of the pavement, the other in the southwest quarter, each measured 1 m. wide, east–west by 2 m. long. Each in turn was divided into two sections by a double row of blocks running east–west. On the west, this resulted in 2 small rectangular areas; that on the north was 75 cm. north–south by 1 m., while that on the south was 85 cm. by 1 m. On the east, the same measurements were retained, but with the larger opening on the north. Along the south side of each of these 4 openings was a single row of 5 slabs and then, touching these on the north, 2 single blocks set 25 to 35 cm. apart.

So much for the main body of the pavement. When we were clearing along the south edge in preparation for photographing, we found to our surprise that additional slabs, also set in asphalt, continued southward under the wall of the excavation. With our allotted time fast running out, we here discovered a series of four large diamond-shaped appendages running well beyond the south line of columns topping and outlining the East Platform. A cave-in of the entire upper south wall of our excavation, following a heavy rain, forced us to snake out the fallen columns, and thus enabled us to work farther into the area surrounding the pavement in something approaching safety. Here, by tunneling nearly one meter beyond the south line of columns, we finally found the ends of two of the diamond-shaped appendages (pl. 11).

As stated, the appendages were four in number. Their over-all width totalled 4.6 m., practically the same as that of the main pavement. Each consisted of four large petaloid limestone slabs, with one end more or less carefully squared. They ranged in length from 50 to 60 cm., and in width from 25 to 35 cm. They were laid flat, in most instances with the rounded end of one against the corner of the next, and with one corner of each of the squares or lozenges so formed touching the south edge of the main pavement area. At each corner of the squares was set a small squarish or triangular stone, sometimes augmented by two still smaller triangular ones. At the south corner of each, the small stones were uniformly triangular in shape. Next to these, in each of the two units completely cleared, lay another large rectangular slab measuring 20 by 50 cm., with its long axis east–west. Extending off the south side of each slab were 4 smaller rectangular blocks, each measuring 15 by 35 cm. These radiated out fanwise toward the south. They were proportionately narrower and less carefully finished than the large blocks from which they fanned out. The extreme south end of the two fans exposed was 1.7 m. from the south edge of the main pavement square. We assume that the two unexcavated appendages, shown by broken lines in the ground plan (fig. 20), probably terminated in similar fashion.

When the appendages were cleared, it was found that the large asphalt-encrusted slabs were bordered by about 5 cm. of the tough yellow clay. Within the triangular and diamond-shaped areas thus delimited, there was a compact fill of greenish-gray clay mottled and streaked with purplish-red, the whole forming a very striking color pattern when freshly exposed or otherwise dampened. The large slabs were encrusted with asphalt to a thickness of as much as 2 to 4 mm.; they were the only stones which, as a group, gave any evidence of having once been asphalt-coated on their upper visible surface.

The lengthy and, I fear, not very lucid description just given cannot adequately set forth the impressiveness of the pavement as it finally lay revealed to our gaze. The blocks of green serpentine, set in asphalt on a yellow clay bed, with a purplish-red veined background for the appendages along the south, presented a most striking picture—particularly so, when the entire surface was cleaned with water and the colors came out in all their richness. Only a full-color photograph, for which the circumstances regrettably were unfavorable, would have done it something approaching justice.

The Forecourt, A–1.—Approximately 1 m. south of the stepped clay platforms in the south central part of the Ceremonial Court, our north–south main trench increased in width from 1.5 to 6 m. Here, beneath 75 to 85 cm. of soft gray sand, we uncovered a level surface of compact reddish clay extending east and west into and beyond the walls of our cut. Southward, it was readily traced for some 10.5 m., i. e., approximately to a line connecting the south fronts of the East and West Platforms. At this point, 27 m. south of the center of the Ceremonial Court (i. e., Datum A), the red clay surface gave way abruptly to a soft sandy fill of undetermined depth and extent. About one meter in front of the clay-floored surface lay three basalt columns, arranged like steps to give easy passage downward from the platform. The columns (pl. 12, *a*) averaged between 30 and 40 cm. in diameter by 2.7 to 2.9 m. in length. As found, they formed a series of risers 15 to 20 cm. high, and treads of approximately the same breadth. Between the topmost column and the actual clay front, in a sandy fill, were short fragments of two or more columns, evidently not in their original position. These suggest that the steps may once have risen slightly higher or, more probably, that between the steps and the platform there was once a sort of landing made of column sections. Beneath the columns, and concentrated chiefly at their west end, was a scattered mass of limestone boulders and fragments; their purpose was not clear. The arrangement here, in general, suggests a level clay platform or forecourt, bounded on the north by the stepped clay platforms, on the west and east by the West and East Platforms, respectively, and on the south by a rather abrupt break into a lower plaza to which access was facilitated by the columns forming a short stairway.

Directly south of the lowermost step column, and at the same level about one meter below ground surface, lay the corner of a broken carved table altar; another smaller fragment lay about one meter to the southwest at the same level. Both pieces were in the soft sandy fill that began at the steps and ran, to an undetermined depth, southward to the edge of Mound A–3. No other fragments of this altar (pl. 64 and fig. 54) came to light, nor can we say with certainty just where the object stood when in use. A detailed description and reconstruction has been made elsewhere by Drucker (infra, p. 182).

Miscellaneous features, A–1.—Elsewhere I have noted that the southeast corner of the Ceremonial Court, unlike the other three corners, was not visible on the cleared ground surface. With tape and compass we computed the approximate location of the missing point, and then set workmen to the task of locating some subsurface evidence of it. In this we were unsuccessful; a test pit to nearly 1.5 m. depth disclosed not the slightest trace of any stonework or columns that could be interpreted as proof of a marked spot or corner. There was evidence, however, of adobe construction in the north face of our pit here—an observation that assumed some significance in light of the brickwork subsequently found when we uncovered a section of the west wall of the Ceremonial Court.

Closer inspection of the surface contours here led us to suspect that some sort of platform or other structure had once lain near or at the probable southeast corner. The tops of six closely set upright basalt columns were visible, beginning 5.75 m. southwest of the calculated corner of the Court and running 3 m. due south. The north end of this row was 3.5 to 4 m. from the presumed wall line of the

Court. On excavation, it was found that 4 or 5 columns lay crisscross, apparently in purposeless fashion, against the base of these uprights. Just east of the southernmost upright, about 7.5 m. from the wall line of the Court, was a band of six shaped rectangular blocks. The blocks varied in size from 25 to 60 cm.; they were set on edge, end to end, and extended east for 3 m. Behind, that is north, of these blocks was a compact clay fill rising some 60 cm. above their level. The thickness and horizontal extent of this material were not determined. In that portion of the area here cleared of surface sand, however, a heavy washing rain disclosed clear evidence of laid up sun-dried bricks. It may be suggested that the six upright columns and the nearby facing blocks once marked the corner of a brick platform perhaps 4 m. wide and extending 7 m. or more south from the main rectangle of the Ceremonial Court at its southeast corner. So far as I am aware, there were no comparable surface stones or columns at the southwest corner of the Court; but the ground contours gave some hint there, too, of an underlying platform or other slightly elevated structure.

There is a hint, too, I think, that the facing blocks fronting the structure at the southeast corner were not primarily made for use here. They consisted actually of two distinct sizes and shapes. The stone at the west end of the row and the two at the east end, were carefully dressed on all surfaces; they averaged very close to 50 by 22 by 8 cm. The remaining three blocks were all much smaller, about 30 by 20 by 7 cm.; they were uniformly less well made, with only one surface flattened, the others rounded off but not dressed down. These two sizes of blocks were employed together, but each with a distinct place, in the north wall of the East Platform, as described in connection with that feature in a preceding section. Their use at the southeast corner of the Court suggests possible utilization of left-over or plundered building material made originally for use elsewhere; and it thus seems possible that the structure which once stood here may have been a later addition, originally not planned for, to the Court area.

MOUND EXCAVATIONS IN AREA A–2

The 1943 excavations in the North Mound, A–2, lying immediately beyond the Ceremonial Court, consisted of a trench 3 m. wide connecting with our main north–south trench through the Court and extending northward to the summit of A–2. Our principal objectives were: (*a*) to determine, if possible, the exact relationship of A–2 to the Ceremonial Court, and (*b*) to learn something more about the nature and construction of the mound itself. It is most embarrassing to have to admit that the profile diagram made of our trench wall has been unaccountably lost and is not available at time of this writing.

There are at hand only my rather sketchy field notes, which were intended to supplement rather than parallel the diagram.

Drucker has noted that his 1942 excavations showed at least one enlargement of the mound. This is described as consisting of the heightening of an older structure by some 2.57 m. of later fill, in which were enclosed a tomb built of columns (Tomb A of the sketch map, fig. 14), a large stone coffer, and other materials. Our trench through the south half of the mound suggested that its core consisted of a series of clay platforms or, perhaps, a low stepped pyramid, somewhat resembling the clay platforms we sectioned in the south central part of the Court.

Throughout most of our 1943 cut, which reached a maximum depth of slightly more than 5 m., the lowest formation was a very dark soft sand, underlain at one point by an equally soft clean white sand. Above the dark sand was a massive deposit of whitish sandy clay, with a lumpy appearance that suggested material brought in as large clods and irregular chunks. This layer, apparently forming a rude but substantial base for the overlying mound platform, varied in thickness from 30 to 100 cm. It, like the overlying platform surfaces, ended abruptly at the north some 5 or 6 m. south of the stone coffer uncovered by Drucker in 1942 and about 2 or 3 m. south of his deepest test pit. Here there was a steeply sloping break accentuated by a thin but unmistakable line of purplish soil, north of which the structural lines gave way to a rather chaotic mass of clay of various colors. How far northward this apparent structural break extended we could not determine, since there was not sufficient time to trace it through or beyond the unexcavated block on which still stood the stone coffer and Tomb A. My impression, which unfortunately cannot be checked against a detailed field diagram, was that of a large pit dug by the natives into a series of older platforms, with the coffer and Tomb A placed in or on a more or less structureless fill, and then covered with red-orange clay.

In the south part of the mound, the several observable steps or platform fronts gradually faded away just north of a point where the short north walls of the Court, if projected toward each other, would have intersected our trench. The terrace fronts and platforms were marked by thin purplish seams, in some places clearly numbering 20 or more layers within a distance of 2 or 3 cm. The lumpy-looking clay also ended abruptly at about the same point in a 30-cm. drop; and the underlying dark basal sand dipped sharply downward nearly 1 meter. There was no evidence of stone columns or other structures at this point; but for some 2 or 3 m. farther southward into the Court area proper, there was only a mass of unstratified reddish and yellowish clay. The upper portion of this mass tended to be redder, and apparently correlated with the material forming the upper part of the mound proper—the red-orange clay described by Drucker as surrounding and underlying Tomb A, the coffer, and other nearby features. As a thinning wedge, the red clay extended southward for another 2 m., suggesting that the southern limit of Mound A–2 actually lay about 6 or 7 m. within the northern wall line of the Court area. Below this mound edge, at depth of 1.9 m., we again recognized the "tierra bonita" layer already described from the exposures in the main Court trench; above it was 1.6 m. of loose gray sand.

The only feature remaining to be described from this part of our diggings is a carved stone altar elsewhere described by Drucker as Monument 13 (pl. 63). It stood upright 14 m. north of Datum A and 6 m. south of the north wall line of the Court. Its flat subcircular carved top lay 80 cm. below ground level; the obliquely broken base rested directly on the red mound clay 1.6 m. below ground level. In the trench wall just east of the altar, at 1.45 m. depth, a burned clay surface suggesting a floor was traceable for about 1 m. northward. Lack of time precluded clearing of the nearby area along the south front of Mound A–2 .

On the basis of our observations, I think there is no doubt that the altar, Monument 13, lay on the mound slope and was directly associated with that structure. I think, too, that the row of axes found 3 m. to the north and at 2.5 m. depth (page 39), underlay the mound structure and cannot be considered as a part of that complex.

In reporting the 1942 excavations in Mound A–2, Drucker noted (see also fig. 9) that "between the tomb and the stone box, nearly touching the latter, was a series of 11 irregularly placed basalt columns, 2.2 to 2.9 m. long, of the same sort as those used in the construction of the tomb, but of smaller diameter and less regular cross section." As he further observed, these were all laid more or less north–south; some were tilted, and those in the middle were generally deeper than the outer ones. They varied in depth below mound surface from 0.68 m. to 1.49 m., and the spacing between contiguous columns varied widely. They suggested nothing quite so much as a mass of building material left over after construction of the nearby Tomb A, and were understandably so regarded until resumption of investigations in 1943.

The columns in question, as seen in 1943, covered an irregularly rectangular area measuring approximately 3.5 m. east–west by 2.5 m. Those in the middle lay some 50 or 60 cm. lower than the outer ones, as if they had once covered a pit or loosely filled space that later collapsed or settled. We removed the columns, and then in the cleared space (pl. 13, *a*) started an exploratory pit 2.5 m. square. This was in a mottled lumpy-looking clay of very compact character. Within a couple of hours, streaks of cinnabar were showing up; and by the time our excavation had reached a depth of 2.5 m. below mound surface, or about 75 cm. below the columns, this brilliant pigment constituted a large proportion of the fill over an area measuring 3.3 by 1.2 m.

Beneath and in the lower part of this cinnabar-filled clay, was a gravelike deposit of jade celts, ornaments, and other objects, to the total number of 108 pieces. The celts, mostly of small size, were scattered more or less haphazardly throughout a rectangular area 2.1 m. east–west by 0.7 m. (pl. 13, *b*). The specimen at the southwest corner, one of the largest in the group, was notched at the bit and bore on its under side the representation of a conventionalized Jaguar-monster (pl. 56, *left*). All others were plain, but well-made and nicely smoothed.

In the midst of the area of greatest concentration of celts were two well-made but undecorated jade earplugs, lying about 12 to 15 cm. apart. Beside each lay one medium-sized and one slender object of jade, all perforated, and suggesting earbobs. West of these, in a curving discontinuous line, were 35 globular beads, with 14 more arranged in a small circle nearby. Some of these were fluted or gadrooned; and in one case we detected a recurrent arrangement of three globular centrally perforated beads followed by a single bead with right angle perforation, i. e., a 1–3–1–3–1 sequence. Between the row of beads and the earplugs was a small circular jade disk and a tubular jade bead. Partially encircled by the beads was a piece of hematite mirror with one perforation; the other fragment, also with single perforation, lay about 60 cm. away and east of the earplugs. Other items present included 11 scattered tubular beads and, finally, beneath the circle of globular beads, a tiny skull carved of jade, ca. 6 or 7 mm. high. It may be noted that much the heaviest concentration of cinnabar occurred in an area measuring roughly 75 by 75 cm., beginning at the east side midway between earplugs and second mirror fragment and almost covering the breadth of the celt-littered zone at this point.

I have referred to this find as a "gravelike deposit," and on the accompanying plan of Complex A it is indicated as Tomb E. Despite this designation, based largely on the arrangement of objects other than celts in such a manner that they suggested ornaments attached to, or closely associated with, a human body, there were no scraps of bone, tooth enamel, or other items clearly identifiable as remains of a human skeleton. As will be apparent in the discussion of the 1943 finds in Mound A–3, there were at least two comparable instances of jade deposits so arranged as to suggest grave furniture but without the slightest accompanying trace of bone or tooth enamel. I am unable to state positively, therefore, that these were actually burials, although the impression that they were is a strong one.

One other point of passing interest may be noted here. In my general description of the Ceremonial Court as I first saw it in 1943, I noted that the 40-m. west wall included 65 visible columns plus a tree-covered gap of about 8.5 m. Where the line seemed least disturbed, the columns were set at intervals of ca. 50 cm., center to center. Allowing 17 additional columns to fill the gap, there should then have been originally approximately 82 on the west side. On the incomplete east wall, there were 34 visible columns starting at the northeast corner, with here and there small gaps that, collectively, might have accommodated from 3 to 6 additional ones, for a total of 37 to 40. In the south half of the east wall, where no columns could be seen there presumably once were about 42 to 45 more. It is interesting to note that Tomb A in Mound A–2 consisted of about 38 full-length columns, and the covering of Tomb E of 11, a total of about 49, which figure would nicely account for the missing pieces in the east wall of the Court.

MOUND EXCAVATIONS IN AREA A–3

The mound designated A–3 was, before its surface had been cleared, a comparatively inconspicuous elliptical structure with rather ill-defined margins. It measured approximately 32 by 24 m., with the long axis oriented in a north-south direction. At the highest point, it rose some 2 or 3 m. above the nearby ground surface on the west, north, and east. It lay directly on a line between Mound A–2, to the north of the Ceremonial Court, and the summit of the Great Mound, to the south. As already indicated, low linear embankments, designated A–4 and A–5, flanked the mound on the east and west, respectively, at a distance of eight or ten meters.

Our excavations at Mound A–3 (pl. 12, *b*) consisted of a north-south trench 6 m. wide, whose center line coincided with the main north-south axis of the group of structures and features collectively designated as Complex A. This trench extended from the north edge of the mound southward for 27 m.; narrowed to 1.5 m., it was subsequently continued another 5 m. southward to the opposite edge of the mound. In depth, the trench varied from 2 m. at the south end to just over 5 m. beneath the highest portion of the mound.

Throughout the entire length of our trench, the mound (fig. 21) was underlain by a fine sandy soil, variable in color, but characteristically becoming lighter with increasing depth. Overlying this sand was a bed of pink and white sandy clays averaging 15 to 20 cm. in thickness. Though somewhat variable in color and in relative proportions of sand and clay, this bed was very well marked throughout some 30 m. of the trench walls. Like similar distinctive and brightly colored zones elsewhere encountered in our diggings, this "tierra

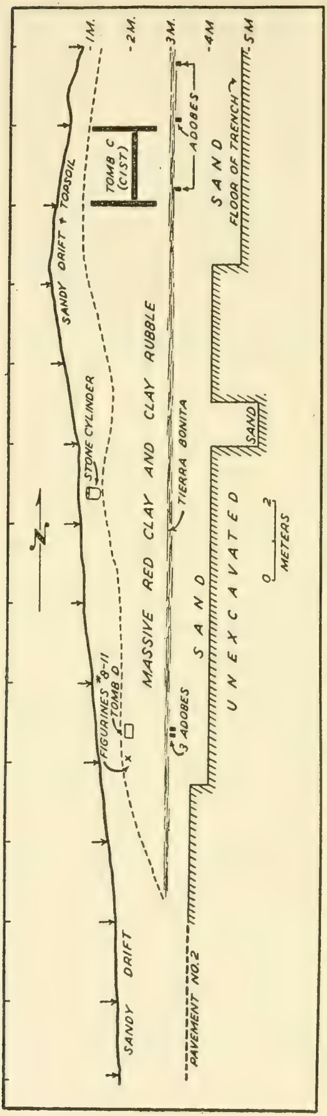
1M.
2M.
3M.
4M.
5M
SANDY DRIFT + TOPSOIL
TOMB C (CIST)
ADOBES
SAND
FLOOR OF TRENCH
STONE CYLINDER
MASSIVE RED CLAY AND CLAY RUBBLE
TIERRA BONITA
SAND
SAND
UNEXCAVATED
0 2
METERS
FIGURINES #8-11
TOMB D
x
3 ADOBES
SANDY DRIFT
PAVEMENT NO. 2

FIGURE 21.—Section through portion of Mound A-3.

bonita" formation was perfectly level at all points where we could check it in our workings in Mound A–3.

Above the "tierra bonita" layer was the main core of the mound. This was a massive reddish clay dome a trifle over 30 m. long, extending north and south just beyond the limits of the colored layer and rising at the highest point 2.25 m. above it. Beneath the mound summit, this red clay was overlain by approximately 70 cm. of sandy soil and humus interlaced with roots. At each end of our trench, where the clay core thinned out and finally disappeared, the gray sand and overlying humus reached a thickness of about 2 m., and finally merged with the sands underlying the colored mound base.

The clay core was by no means uniform in character. In its central portions, 50 to 75 cm. below its buried upper surface, the reddish clay graded rapidly into a chaotic mass of burnt clay, fire-blackened earth, stones, and an occasional tiny sherd—in short, a rubble of burnt and unburnt materials almost entirely devoid of artifacts or other cultural remains. This formation was most strikingly apparent below the highest portion of the mound, but it could be traced southward over a maximum horizontal extent of 18 to 20 m. In the northern half of the mound profile it was much less distinct. All of the several structural and other features found during our work in this mound were clearly in or on the red clay core.

It has been stated that the clay core rested on a level bed of colored sands and clays. What I presume represented a bit of aboriginal engineering in achieving this level base may be remarked here (fig. 21). At a point below, and beginning roughly 2 m. north of, the mound crest, our trench face disclosed a series of three sun-dried bricks, evenly spaced at intervals of 1.5 m. Each brick was yellow in color, measured 10 by 10 by 12.5 cm., and stood upright with its upper end in direct contact with the lower surface of the colored sandy clay bed. To the south, 13.5 m. from the first of these three adobes, was another "nest" of three, of the same size, color, and shape, and all set similarly on end and just touching the colored layer. I am inclined to think that these bricks, all with their upper ends on a level, were part of an aboriginal system of grade stakes, sighted in, with the gray underlying and surrounding sands then leveled off flush with their tops to provide a perfectly flat, level, and uniform foundation for the "tierra bonita" base underlying the red clay mound core.

Within the mound proper, the principal feature was a large rectangular cist, walled, floored, and roofed with shaped sandstone slabs (pl. 14). The cist lay just north of the highest point of the mound (fig. 21), about 60 cm. below its surface. It was completely surrounded, underlain, and covered by the massive red clay and clay rubble of which the mound core had been constructed. Directly over the cist, the upper surface of the red clay reached its highest point, suggesting that when the tumulus was raised, its primary purpose was to cover this boxlike structure. The cist, it may be noted, was almost exactly bisected along its shorter axis by the axial line of Complex A on which our trench had been centered.

The cist (pl. 14 and fig. 22) measured 5.2 m. from east to west by 1.8 m. north to south, outside dimensions. Rectangular in shape, it was delimited by a large sandstone slab at each end, one large and five small slabs on the north side, and one large and two small slabs on the south side. All of the slabs were carefully shaped and dressed to a rectangular form, and were set on end. The larger ones ranged in width from 1 to 1.3 m.; in length, from 1.7 to 1.9 m.; and in thickness from 12 to 18 cm. The smaller ones varied in width from 45 to 75 cm. and in thickness from 10 to 15 cm.; in length, they closely approximated the larger ones with which they had been used. All had been securely planted to a depth of 40 to 60 cm. in the mound fill.

The cist floor consisted of nine similarly dressed sandstone slabs, varying considerably in size and proportions (fig. 22). The edges and corners had been painstakingly shaped and carefully fitted to one another so as to form a comparatively smooth even floor. None of the floor slabs equalled in size or weight the four largest pieces used in the walls.

The cist was originally covered with five large slabs, of which only the one at each end still remained unbroken. The other three had given way in their middle portions, so that the fragments sagged downward deeply into the cist fill. The depth of the structure from the upper end of the vertical wall slabs to the floor was uniformly very close to 1.2 m.

Removal of the cover slabs and fragments disclosed a compact fill of reddish clay, similar to that composing the mound core. In the center of the cist, however, the broken ends of the slabs rested on only about 30 cm. of this material, suggesting that the structure had not been entirely filled in at the time it was roofed over. It may, indeed, have been left unfilled so far as the builders were concerned; and the material we found between floor and roof slabs could readily have found its way into the cist from the enclosing matrix through the gaps in the walls. If these gaps had ever been closed with wood or other perishable material, there was no evidence of it at the time of our investigations.

As we worked downward into the cist fill, traces of a brilliant red coloring matter, apparently cinnabar, began to show up at a level some 20 cm. above the floor. This became increasingly abundant over the central part of the floor area, forming in places an almost

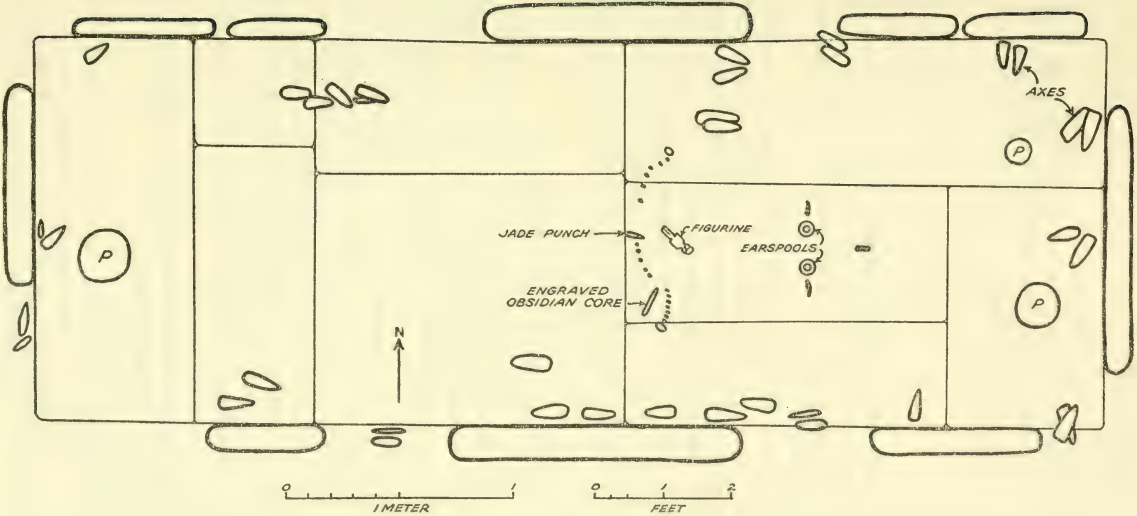
AXES
P
P
P
JADE PUNCH
FIGURINE
EARSPOOLS
ENGRAVED OBSIDIAN CORE
N
0
1
1 METER
0
1
2
FEET

Figure 22.—Plan of Sandstone Cist (Tomb C), with contents, in Mound A-3. (See also p. 35.)

pure bed of pigment of a thick, puttylike consistency. Laterally, the stuff occurred in thinning quantities to within 25 cm. of the north and south walls, and could be detected to within 80 cm. of the east end and 1.5 m. of the west end. The bed of cinnabar, roughly elliptical in outline, thus measured approximately 2.25 m. east to west by 1.05 m. north to south. Outside the limits of this elliptical area, the red-clay fill lay directly on the floor of the cist.

Scattered about on the cist floor, chiefly at or near the edges, were 37 celts. Twenty-four of these were found as more or less isolated pairs; the others occurred in larger groupings or, in rare instances, singly (fig. 22). Nine were of serpentine, the remainder of light gray jade. None occurred within the zone covered by the cinnabar, although two on the north and a single one on the south barely touched the pigmented area.

Also on the floor, 30 cm. from the east end and 50 cm. apart, were two poorly preserved but restorable pottery vessels. That to the north was a small bottle-shaped piece 10 cm. in diameter, with a loop handle. The other was approximately 20 cm. in diameter, with raised annular base and a rim curiously reminiscent of the lip form of the abalone shell (pl. 19, *f*). Near the west end of the floor, about on the midline of the cist, were the remains of a third pottery vessel, very soft and badly broken. Modeled on one side in bold relief was the face of a jaguar with wide-open mouth and exaggerated canine teeth (pl. 18, *b*). There were no other pottery artifacts.

Perhaps the most interesting finds were made beneath the bed of cinnabar. Slightly more than 1 m. from the east end of the cist and almost exactly on its east–west midline, was found a well-polished jade tube 75 mm. long. West of this some 18 cm., and about 15 cm. apart, lay two finely incised jade ear spools, the broad decorated surfaces (pl. 52 and fig. 46, *b*) turned upward. With each was a cleverly carved triperforate earbob, also of jade, depicting a conventionalized animal jaw (pl. 57, *c* and fig. 46, *a*). Scattered through the heavy masses of cinnabar surrounding these objects were scores of tiny jade beads, pendants, spangles, and other objects. Many of these pieces were less than 1 cm. long and not more than 1 or 2 cm. in transverse diameter, but all had been polished and perforated for attachment to some material, presumably a textile. Several small tubular beads, 2 cm. or so long, had been carved into faithful representations of duck heads. Along with these objects were several small bits of worked and bored rock crystal.

Approximately 50 cm. west of the paired ear spools, and also on the midline of the cist, lay a small figurine fashioned from serpentine. This, described elsewhere by Drucker as No. 12, was 11.5 cm. tall, and had obsidian insets in the eye sockets. Another 15 cm. to the west was a spindle-shaped or punchlike object of jade, with broken tip. South of this, 25 cm. distant, was an obsidian core 12.5 cm. long, bearing on its flaked surface the incised outline of a crested eagle with outspread wings (fig. 48). In an irregular curving line 90 cm. long and centering at the jade punch, was a row of 64 globular jade beads, several of them with fluted sides. At each end of this bead row was a small flattened elliptical jade object apparently representing a turtle carapace. All of these objects—jade, serpentine, rock crystal, and obsidian—lay just above the floor slabs, and were completely surrounded by cinnabar.

As will be apparent upon reference to the accompanying plan of the cist and its contents (fig. 22), the objects in the cinnabar bed lay in such positions relative to each other as to suggest mortuary offerings on a burial. The tube at the east end suggests a hair pipe or similar ornament, and the ear spools and associated objects were about where one would expect to find them on either side of a skull. The serpentine figurine might be supposed to have lain on the lower chest, with the beads and other specimens representing a girdle. Despite the most careful examination of this area, however, no trace whatsoever could be detected of bone, of tooth enamel, or of other human remains. There is thus no direct proof that this cist ever actually contained a burial.

Seven meters south of the cist, and approximately on a level with its top, was a well-made stone cylinder. This stood upright on the clay mound core (fig. 21; pl. 12, *b*) directly on the north-south axis of Complex A. The cylinder, Monument 14 (pl. 15, *a*) measured 38 cm. in diameter by 51 cm. in height; both ends were flattened. Through its center ran a finished circular hole 9 cm. in diameter, plugged at its lower end by a carefully fitted planoconvex stone disk 5 cm. thick. The function of this object is uncertain; it may have been an offertory cylinder. There were no artifacts in or directly associated with it.

Between cist and cylinder, three meters north of the latter and on a level with its base, were two serpentine celts. Both were lifted by the workmen before their exact position was noted, but the remaining imprint of the larger showed that it, at least, had been set on end with the blade upward. Both were certainly very close to the axis line for Complex A. Nearby, and on the same level, were scattered fragments of what seems to have been a large curiously shaped sandstone vessel or other object. The fragments suggested a circular flat object, perhaps 38 to 45 cm. in diameter, with a large dressed central opening 10 to 15 cm. across. Between the rim and this inferred central opening were the remnants of a flange at least 7 cm. high. All fragments noted were at least 2 cm. thick, and the workmanship generally was good. The inferred dimensions of this object and its central opening approach those of the ends of the cylinder already described, and one wonders whether there may have been originally some close and direct association functionally between the two objects.

Also from the rubblelike mound fill between cist and cylinder came two finds of smaller artifacts that merit notice. One consisted of several small scattered bits of jade, each roughly rectangular in outline and measuring about 6 by 10 mm. In each case, one surface was flat and well polished; the reverse face was rough and uneven, and bore closely adhering stains of some black substance. In one instance, three or four of these bits of jade were still stuck together, edge to edge, by some unidentified adhesive, with their polished surfaces all in one flat plane. There seems no reason to doubt that they had once formed a part of a jade mosaic; but it is manifestly impossible to say further what its original appearance, size, or function had been.

Similarly without any direct associations was an amber pendant unearthed nearby. It was more or less pear-shaped in form, unperforated, and measured approximately 45 mm. in length by 15 mm. in maximum diameter.

Six meters south of the cylinder (Monument 14) and 13.2 m. south of the cist, streaks of cinnabar were encountered by the workmen at a depth of about one meter below the mound surface. These again were very close to the axial line of Complex A. Beneath them was a rather well-defined rectangular area (fig. 23) measuring approximately 30 by 50 cm. in horizontal extent, long axis oriented east and west, and

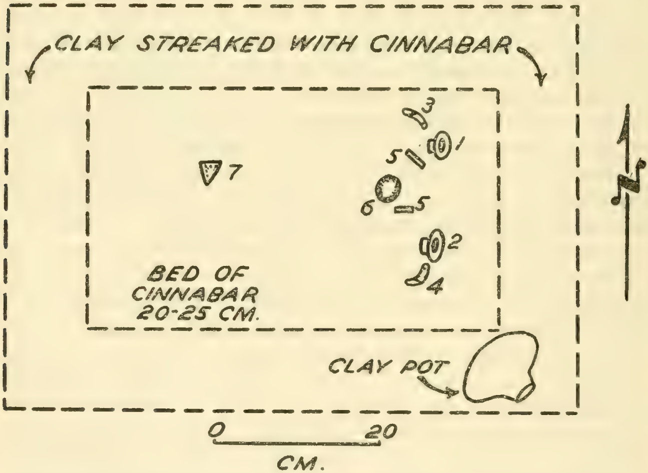

Figure 23.—Plan of child's grave(?), Tomb D, Mound A–3. (See also pl. 15, b.)

very heavily impregnated with cinnabar. Surrounding this rectangle was a zone about 10 cm. wide wherein the soil was streaked and unevenly mixed with more cinnabar. The main deposit of cinnabar was 22 to 25 cm. thick. At the bottom, 12.5 cm. from the east end and 15 cm. apart, lay two undecorated jade ear spools, each 37 mm. in diameter. These, unlike the two in the cist, were simple affairs, consisting of a flat disk with short tubular stem; in one, the stem was a separate piece. Beside each lay a jade earbob fashioned into a replica of a canine tooth and perforated at one end. Nearby lay two tubular jade beads 32 mm. long, and a small concave disk with scalloped edge and one large central and two small marginal perforations. Near the west end of the cinnabar bed was a small subtriangular piece of worked jade. Outside the main cinnabar deposit, in the southeast corner of the streaked border zone, lay a small undecorated clay pot so softened by percolating ground water as to be unsalvageable. It may be roughly described as having had a squat body, 13 cm. in diameter by 7.6 cm. high, surmounted by a short cylindrical neck 37 mm. in diameter and the same in height.

Here, as in the cist, the ear spools and nearby objects lay in such positions relative to one another (pl. 15, *b*) as to suggest that they were originally affixed to the head and chest of a corpse, this time that of a child; and the feature has been designated, perhaps unjustifiably, as Tomb D. Here again, as in the cist, there were not the faintest traces of human bones, teeth, or other remains in the area.

One meter south of the "grave" or cache just described, and at the same level, were found four small serpentine figurines, described elsewhere as Figurines 8, 9, 10, and 11 (see Drucker, infra, p. 157). They, too were in the upper portion of the clay mound core; and until the moment of discovery their presence was totally unexpected. Unfortunately, these were turned up by the workmen while I was temporarily engaged in another part of the diggings, and during a period when no other professional member of the expedition was on the scene. I am unable to state, therefore, just how they occurred in the ground. At the same time, I am fairly certain that they, like the nearby "grave" noted just above, lay only a few centimeters below the upper surface of the red clay mound core on which had been set the stone cylinder (Monument 14) and the nearby two serpentine celts. All were oriented along the axial line running north and south through Complex A.

Two other features, whose exact relationship to Mound A–3 is not certain, may be noted at this point. It will be recalled that the upper surface of the red-clay mound core sloped downward at both ends of our trench to intersect finally the prepared base of colored sands. At the south edge of the mound, this intersection point was 18 m. from the cist. Here the gray overlying aeolian sands reached a thickness of 1.5 m., and then merged with the lighter colored sands beneath the prepared base. Less than a meter beyond the edge of the colored base sands, approximately 50 cm. below their level, and 1.8 m. below the present ground surface, was found a pavement of serpentine blocks. Generally similar in character to Pavement No. 1 beneath the East Platform of the Ceremonial Court, A–1, it was rather less well-preserved, somewhat cruder and simpler, and it deviated in certain particulars. An unknown number of stones that once formed a part of the pavement on its west edge were missing, but a sufficient part of the structure remained to permit adequate description of what must have been its original appearance (pl. 16 and fig. 24).

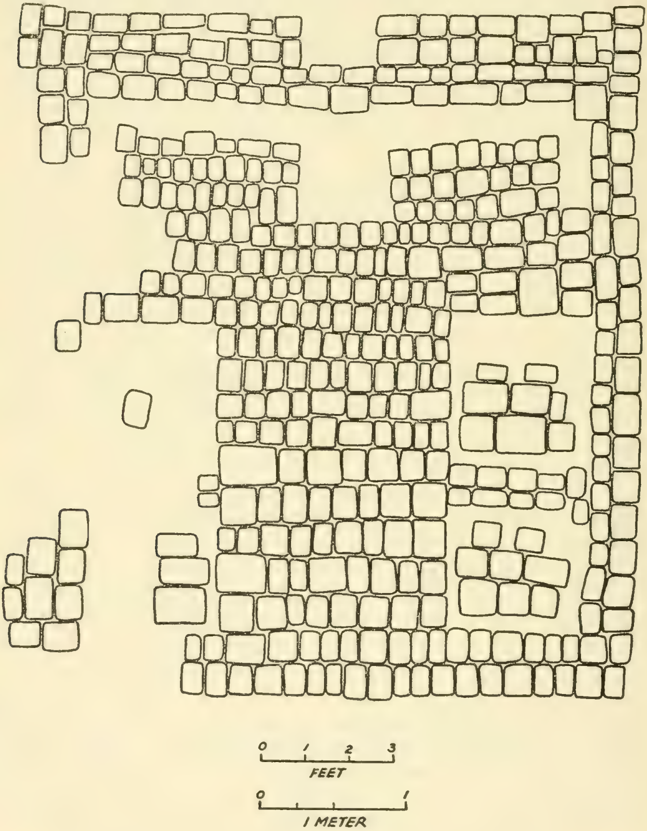

Figure 24.—Plan of Pavement No. 2; top is north. (See also pl. 16.)

Pavement No. 2 measured 4.8 m. in length by 4.35 m. in width, the long axis paralleling, and coinciding with, the north-south axis of Complex A. It consisted of subrectangular blocks of green serpentine, each with dressed sides, ends, and upper surface; the undersides were apparently rarely or never carefully dressed. In size, the blocks ranged from 10 by 11 cm. to 26 by 36 cm; thickness averaged from 7 to 8 cm. When uncovered, there were 399 of these blocks still in place; originally, there were probably between 75 and 90 others in the now mutilated portions. In the north part of the pavement, the stones had been laid in or on a bed of clay; to the south, many lay directly on sand. The blocks on the north, furthermore, had generally a smooth, worn appearance that was missing, or at least was much less noticeable, on those in the south portions. Unlike those in Pavement No. 1, none of the blocks in this second area had any evidence of asphalt or pitch on, under, or between them.

The general similarity of this structure to Pavement No. 1, as well as its generally simpler character, will be readily apparent on comparison of the accompanying ground plans (cf. figs. 20 and 24). Both approximate a square, at any rate in their main portions; each has a well-marked and purposeful break or notch in the center of its north edge; and each has, or evidently originally had, a fairly large unpaved area in its north half, two unpaved or only partially paved smaller areas in its southeast quarter, and two similar unpaved or partially paved areas in the southwest quarter. In Pavement No. 2, however, the central portion was solidly filled with blocks, whereas in Pavement No. 1 the area just south of the center consisted of a rectangular paved section surrounded by a narrow unpaved strip. There was no trace at Pavement No. 2 of the rather elaborate appendages noted along the south edge of No. 1. To judge from such observations as we were able to make in the short time left us when it came to light, the second pavement rested on little more than a smoothed surface of sand and clay, whereas Pavement No. 1 was underlain by a carefully prepared foundation of some depth and solidity.

Six meters due south of Pavement No. 2, our trench along the axial line disclosed a bed of worked serpentine objects (pl. 15, *c*), mostly of rather inferior order. Some were clearly intended as celts, probably nonutilitarian, and others were little more than oblong flattish blocks and cobbles that, with a minimum of effort, could have been fashioned into celts. These objects, 253 in number, covered an area measuring approximately 1.5 m. across, which was bisected by the north–south axis line of Complex A. In the south half of this deposit, the individual pieces lay flat, but closely spaced; in the north portion, they were set in slanting position, with each successive row lapped over the next on the north, more or less like shingles on a roof. Beneath three of the larger axes in this group was found a hematite mirror. There were no other artifacts under this deposit, nor was there evidence of a specially prepared foundation for it.

From the bed of celts just described, our trench ran southward another 27 meters or slightly more, directly to the presumed foot of the Great Mound. Here, just at quitting time, we found, at depth of 2 m., a cache of four or five closely grouped pottery vessels. They were left in situ, covered with leaves and sand, for further study and removal next day. Unfortunately, before we returned they were pulled out of place and badly broken up, by parties unknown. There were no other objects associated with them, nor was there any clue as to the significance of the deposit.

EXCAVATIONS IN THE EAST EMBANKMENT, AREA A–4

The embankment designated A–4 has already been noted and described briefly. It lay east of Mound A–3, extending in a north–south direction from the basal platform of the Great Mound northward to within approximately 10 or 12 m. of the southeast corner of the Ceremonial Court. Surface inspection revealed no obvious structural features or monuments at any point throughout its traceable extent.

Our tests here were very limited, consisting only of a transverse trench some 8 m. from what we took to be the north end of the embankment and about 20 m. from the southeast corner of the Ceremonial Court. The line of columns on the east end of the court, projected southward about 20 yards, would have intersected our trench at its center. The trench itself was 1.5 m. wide by 13 m. long. At each end it was 2.3 m. deep; at the center its depth was 3.2 m.

The lower part of the trench was in a tough whitish sandy clay. At the west end, this was overlain by featureless sandy gray soil grading upward into the humus and leaf mold of the present ground surface. In the middle of the test trench, and also at its east end, a variable thickness of red clay intervened between the white clay and the topsoil. This red clay resembled rather closely the material composing the core of Mound A–3. Here and there in its upper portions shaped sun-dried bricks of reddish to yellowish clay were found. They were not easily defined, except in a few instances, and did not suggest a definite wall, platform, or other construction. They occurred singly or as two or three placed side by side. So far as our explorations here are concerned, the east embankment consisted mainly of heaped up earth or clay with, at most, a sprinkling of sun-dried bricks. There was certainly no evidence here of brickwork comparable to that noted in the west test pit in the Ceremonial Court or in the East Platform. Possibly further investigation nearer the base of the Great Mound would provide more precise data regarding construction of the embankment.

SUMMARY OF STRUCTURAL INVESTIGATIONS

In summarizing the results of structural investigations at La Venta in 1942 and 1943, I wish to direct the reader's attention again to Drucker's apt comment that "the site of La Venta was a long way from being completely excavated. The structures are large and complex, and several seasons of intensive excavation should still be done . . ." With this judgment there can be do disagreement whatever. Our operations during both seasons were concerned very largely with the remains north of the Great Mound in Complex A; but even so, we left a great many problems unsolved, and others wholly untouched. Until additional investigations have been carried out in and around virtually every one of the structures we explored, as well as among others not yet closely studied, we must remain pretty much in the dark regarding the exact nature of the Ceremonial Court, of the two principal secondary mounds nearby, and of a host of other archeological features that require attention. I emphasize, therefore, that such generalizations as are here offered are to be regarded as preliminary, and as subject to extended revision if and when further large-scale operations are undertaken at the site.

The evidence is rather strong, I think, that the Ceremonial Court was not originally an elevated platform, but rather it was a sunken area whose floor lay well below the surrounding ground level. Enclosing this area on its east and west sides, but apparently extending only part way across the north and south sides near the corners, were clay and/or brick embankments topped by a row of vertical basalt columns, perhaps meant to imitate in more permanent form a palisade of logs. Rows of shaped stone blocks set end to end ornamented the slanting inner and outer faces of the clay embankment. Entry to the Court from the south was across a raised clay-surfaced forecourt and over a stepped clay platform that probably at no time much exceeded 1.5 to 2 m. in height.

Flanking the forecourt and south entry were brick platforms erected on a clay fill and surrounded by closely set well-braced vertical columns. These platforms may once have supported monuments. Both platforms included in their construction caches of celts beneath the brickwork; and the east one, at least, was underlain by a large stone jaguar-mask pavement.

On the north side of the Court, the line of columns was not continuous, there being a gap of unknown extent between the short rows running toward each other from the northeast and northwest corners. To the north, just outside this gap, was a stepped clay pyramid whose exact relationship to the original Court enclosure remains to be determined when more extended excavation is possible.

There is clear evidence from the two seasons' work of rather extensive remodeling of structures in Complex A. The stepped clay platform or stile just inside the forecourt appears to have been redecorated frequently and raised several times. I am inclined to think that the Court floor itself may have been built up at least once by the introduction of a massive clay fill that raised it by nearly 1.5 m. The varicolored clays or "tierra bonita" layer encountered by us at depth of 1.5 to 2 m. wherever we penetrated the deep surface drift sand presumably represents the raised floor level. This surface brought the Court floor up nearly or quite to the level of the inset lines of shaped stone blocks noted by us on the east and west walls of the Court and also on the north wall of the East Platform. Above this higher floor there still rose a stepped platform on the south—my C′C″ and the final reddish clay cap, and Drucker's D and E structures.

Additions were also made, I believe, to the north Mound, A–2. Although we cannot be positive, it seems that the mound that finally resulted extended on the south just into the Court area, where its extreme extension formed a thinning wedge overlapping the later Court surface marked in part by the colored clay layers. I would surmise that the Court area was still in use at its higher floor level after the north Mound, A–2, had reached its final form and height; but the exact relationships here are obscure. The monkey statue (Monument 12), the nearby pairs of stone slabs, and the altar (Monument 13) on the south slope of Mound A–2, all lay or stood at or near the bottom of the surface drift sand, on a soil that may correlate with the red-clay core of Mound A–3 on which the cylindrical offertory, Monument 14, stood in the south mound, A–3. Whether other monuments and statues, including Stela 3, in the Ceremonial Court were also associated with the upper and later deposits, or alternatively stood on older platforms that protrude upwards into the drift, I cannot say.

I am tempted to suggest that Tomb A, the column-covered "grave" (Tomb E) nearby, and the stone coffer (Tomb B), all in the upper portion of Mound A–2, were constructed at a somewhat later time than the Court; and that the columns used in the first two features were taken from the east wall (mainly its south half) of the Court. If further investigations bear out our impressions that there are no columns in the indicated portion of the Court enclosure, then the fact that almost the exact number of missing columns were used in the structures in Mound A–2 would seem to offer a plausible explanation as to what happened to the missing stones.

La Venta's builders showed a definite preference for certain materials for their color and structural qualities—masses of heavy clays were used in preference to ordinary dirt and adobe bricks; adobes were used occasionally for smaller structures, such as wall and platform cappings; and the use of colored clays suggests an imitation of the painting or stuccoing of structures. Massive constructions, such as Tomb A and the Court stockade, were built of basalt columns in lieu of logs; and large carefully shaped sandstone slabs were also used for burial structures, as in the Cist (Tomb C).

Despite the evidences we noted of repeated rebuilding and remodeling I do not believe that any great time span or major cultural breaks are indicated. We found distressingly few artifacts in the 1943 work; but such as did come to light were in line with what might have been expected on the basis of Drucker's stratitests and more or less incidental structural investigations in the preceding year. In the Court fill itself, it will be recalled that almost identical covered pottery vessels were found deep in the lower clay and in the upper sandy drift. Otherwise, almost no small material remains were found, except celts and, of course, the specimens in Mound A–3; and the figurines, ear spools, jade and serpentine celts, and other objects were all closely similar in type, workmanship, and artistic style to those recovered in greater numbers in 1942 by Drucker in Mound A–2 and elsewhere. It may safely be concluded, therefore, that all of the structural and other materials encountered by us in 1943 belonged to the cultural horizon defined by Drucker on the basis of his more extended observations and analyses; and the distinctive art style shown in the two stone pavements, the jades, and the other small carvings found in the various structures, supports assignment of the structures to the Olmec culture.

THE CERAMICS OF LA VENTA

By Philip Drucker

INTRODUCTION

The following pages deal with the various La Venta wares and their vertical distributions in the stratigraphic sections, and with figurines and other minor objects. Because of the fragmentary nature of the pottery, and its consistently poor state of preservation, it has been necessary to group it into several rather large and clumsy classes; I have tried, however, to make clear when a "ware" seems to be a pretty clean-cut unit, and when it consists of several different, but overlapping, subgroups. I have also tried to avoid some of the pitfalls into which I tumbled in discussing the ceramics of Tres Zapotes—one of my blunders, that relating to the Fine Paste wares, I have attempted to correct. In general, however, the taxonomy of the La Venta wares is rather like the one set up for the Tres Zapotes material, in spite of all efforts to establish as refined and precise a classification as possible. In part this is due, in addition to the very apparent fact that the materials from the two sites are quite similar, to the fact that the local pottery is not only drab but poorly standardized. Examples may be found within the group I have designated Coarse Brown ware that vary widely in color, texture, hardness, and surface finish (or what is left of the last named). Yet when a sizable lot of sherds are laid out, one can arrange a complete series from one to the other extreme in which the individual sherds vary almost imperceptibly one from the next. I could find no way to divide such series into several distinct "wares." Similar drab and unlovely pottery is found, I gather, in other parts of Mesoamerica, but in few other places is it the only material available for ceramic classification. If painted pottery occurred in fair preservation and moderate abundance, it might be preferable to base the classification and the interpretations as to culture growth at the site on it, paying but slight attention to the dilapidated plain wares. Lacking such material, however, it becomes necesary to use the plain wares, sorting them into such divisions as can be consistently used, and which accomodate the bulk of the material, and then as a check plotting the vertical distributions of the various classes to see if they yield meaningful curves. In defense of my rather broad ware categories, it may be said that they will be shown to produce consistently regular distribution curves, indicating a consistent uninterrupted history of development or modification of the local ceramic pattern that agrees with the evidence of figurine distributions in the same trenches, with that of the deposits themselves and that of the art style. Hence, I believe that the pottery classification is essentially a correct one, since the history of local ceramic development derived from it conforms to that of other cultural developments at the site.

In describing the several wares, I have drawn very heavily on the criteria for pottery description suggested by Miss Shepard in her chapter on that subject in "The Pottery of Pecos," and elsewhere (Shepard, 1936). The quantitative appraisals as to amount of tempering material (slight, moderate, heavy), size of the particles, and the like, conform as closely as I could make them to the standards and scales set by her. The only exceptions lie in the fact that for computing hardnesses I have used the modified Mohs scale with the half steps suggested by March (1934) and I have also used March's standards for description of kind and amount of crazing. Color nomenclature is based on Ridgeway (1912); his color names are capitalized, while common names are commenced with lower-case letters.

The first part of the pottery description consists in accounts of the pastes and surfaces of the several wares. The subject of vessel shapes has been separated out for discussion because, first of all, the shapes originally represented by only a relatively small proportion of the sherds could be determined, and second, these more common shapes were not restricted to any one ware, but recurred in most of the different wares.

WARES

COARSE BUFF WARE

Coarse Buff is one of the more abundant wares at La Venta, and seems to be a particular characteristic of that site. It appears to have been used both for household purposes and ceremonially as well. The sherds in our collections are for the most part drab and rather crude looking, but a few better preserved fragments indicate that when new, vessels of this ware were fairly well finished and of more pleasing appearance. Erosion of the surfaces has left the majority of the sherds with a sandpaperlike texture due to the protrusion of the tempering materials.

Paste.—The majority of the sherds of this ware have buff-colored exteriors, and dark cores that range from 40 percent to 70 percent of the width of the sherd in thickness. The light areas are in tones clustering about Cartridge Buff, 19″f, and Pinkish Buff, 17″d; variants range from Ivory Yellow, 21″f to Vinaceous Buff, 17″d. The cores are mostly in the dark gray ranges, from Deep Mouse Gray, 15''''i, to Dark Mouse Gray, 15''''k, and from Deep Neutral Gray to Dusky Neutral Gray. Occasional sherds from what appear to be less well-fired vessels, have cores with dark olive-gray shades. One of the distinctive features of this ware is the type and abundance of the aplastic materials. Sherds appear heavily tempered (apparently with over 30 percent of volume of paste occupied by visible inclusions) with two types of materials. The first, and most abundant, consists of light grayish to whitish translucent rounded grains, the most of which are on the borderline between "fine" and "medium," ranging from 0.2 to 0.3 mm. diameter. A small proportion of these inclusions range in size up to "coarse" (up to 1.0 mm. diameter, and infrequent pebbles that seem to be of the same material have diameters up to 2.5 and even 3.5 mm. Inclusions of this pebble size are rare. The material appears to me to be waterworn quartz or quartzite sand, although this identification has not been checked by a competent mineralogist. In among the light-colored inclusions is a small but fairly constant proportion of slender elongated angular plaques of a highly lustrous black material. An unusually large example measured 1.5 mm. long by 1.0 mm. wide (it was proportionately wider than the average) by 0.5 mm. thick; it flaked off into thin scales, one of which was measured as 0.2 mm. thick. I was unable to detect any yellowish or coppery tones to these particles that might indicate they were of micaceous material. These particles usually lie parallel with or at a low angle to the surface of the sherd as though manipulation of the clay had arranged them thus.

The texture of the paste is rather dense, despite the abundance of the inclusions; the sherds are not typically friable. Breaks seem typically to be sharp and fairly clean, and at nearly right angles to the surfaces. Fresh breaks have a granular sandpapery surface because of protrusion of the aplastic materials.

Hardness is, because of the abundance of the inclusions, difficult to determine; I obtained an average of +3 in a series with a range of from +2 to +3.5. While this figure may not be precisely accurate, it does show that Coarse Buff is the hardest of the local wares. Whether this means that it always was the best, in point of strength, at least, or simply that it has deteriorated less during the long period of leaching and attack by soil acids, is impossible to say.

Surface features.—Most of the Coarse Buff sherds have none of the original surface left, or so I assume, for it is difficult to see how the smoothing and manipulation of manufacture could have left the vessels of this ware with the sandpaperlike surfaces the sherds have at present. A small proportion of specimens still have smooth-finished areas. It would appear that in most cases the vessels were given a finishing coat of the same clay as that used for the paste, for most of the well-preserved surface areas are of the same color as the exterior areas of the paste, centering around Cartridge Buff and Pinkish Buff. Often at first glance original surface areas appear to be somewhat lighter in tone than adjacent areas of exposed paste, but this seems to be due to the fact that the eroded portions rapidly collect dust and grime, as well as being given a darker appearance by the shadows cast by projecting particles; freshly cleaned sherds, viewed in direct natural light, usually show the same tones of buff on preserved and eroded surfaces.

A small but fairly constant number of sherds of obviously Coarse Buff paste have a thin wash (too thin to be called a slip) of brownish hue very close to the common average surface color of Coarse Brown ware. They look as though they had been given a final coat of Coarse Brown ware clay rather than that of which their paste was made. Obviously such sherds should be classed separately under some such category as "Brown-washed Coarse Buff ware," but to do so with the present maltreated sherd collections would show nothing but the degree of preservation of sherd surfaces, for eroded specimens of this group cannot be distinguished, megascopically at least, from ordinary Coarse Buff ware sherds that have lost their original surfaces. Therefore I have made no attempt to list the Brown-washed sherds separately in the stratigraphic sherd counts. Perhaps someday we may have a series of La Venta materials in better condition and can give this group the status of a distinct ware.

A moderate proportion of normal Coarse Buff sherds found have one darkened surface, that is, the dark "core" extends to, or nearly to, the exterior on one side; presumably these are areas which were unevenly or poorly fired. Where the original surface is preserved it usually has a buff color, which gives a sort of overtone to the dark gray paste; that is to say, the surface buff color is so thin that the dark paste "shows through," like dark house paint under a thin coat of whitewash.

The hardness of preserved original surfaces seems to be slightly less than that of the paste, being somewhere between +2.5 and −3. (This softness may be the result of erosion, of course, rather than the original condition of the ware.) Surfaces are ordinarily even and smooth, except for interiors of jars and other vessels with restricted orifices in which slight ridges and rough areas occur. Such interiors often bear faint "raking" as though they had been given their last going over with a corncob or some similar object that left faint parallel striations on the surface. Exteriors, however, and bowl interiors, are always even and smooth. Lustrous surfaces are not to be seen, at present at least; even the best surface areas are characteristically dull.

As indicated previously, no slip can be distinguished in specimens of this ware. Where the final coat was of the same clay as that used in the paste, it fused so completely that no juncture line can be seen; and in the case of the Brown-washed sherds, the wash layer cannot be seen in cross section even with a hand lens; it is extremely thin. The final coat or coats, however, covered the aplastic inclusions so that they do not protrude through the smooth surfaces. For this reason the original surface seems to have been a float or a wash rather than a true slip. That the surface should have eroded from so many sherds does not necessarily indicate an original difference in hardness, but may simply reflect the effect of direct contact with the clay soils. As a matter of fact, many broken edges of sherds were eaten away to blunt rounded edges, from the original sharp fracture planes. When excavated, and still saturated with soil moisture, the sherds were soft, almost mushy, in fact, most of the way through.

Decoration.—There is no evidence that Coarse Buff ware was normally painted; at least, no painted examples have survived aside from five sherds of the ware with asphaltum paint (?). Instead, incised designs were applied to the vessels, or one or another of several types of stamping was used. The vast majority of decorated pieces can be called "decorated" only by a most generous extension of the term, for the ornamentation consisted in the incising of from one to three fluid but wavering more or less parallel lines about the interior or exterior of the rim. Due to the eroded condition of the sherds it is difficult to determine surely, but it seems as though these lines were applied prior to firing, but after the drying of the vessels. Much less common are patterns consisting of incised lines in more complex arrangements (even though I included as "complex" all designs more elaborate than the arrangements of lines encircling the rim). Both angular and curvilinear patterns occur. Bands of alternating hatched triangles (fig. 25, *b*), appear on a number of sherds; in passing it may be noted that this design, common in Old World Neolithic wares and in northern North America, appears to be rare in Mesoamerica. Elongate double **S**-shaped figures (turned sideways) (fig. 25, *e*), occur several times, and tend to be associated, as at Tres Zapotes, with returned side bowls with angular shoulders. A small proportion of linear designs suggest elaborate, and probably representative patterns (figs. 25, *k;* 26, *d;* and 27, *f*). Unfortunately our material is too fragmentary to make a detailed description of such pieces worth while, for in none of them can the complete pattern be made out, except for one that with a little imagination could be considered a bird's head (fig. 26, *d*).

Postfiring engraving is rare. There are a few sherds however that carry what seem to have been decorative bands so applied (fig. 25, *f*, *g*). One of the cited figures is very heavily, as well as roughly engraved; the edges are quite irregular and ragged.

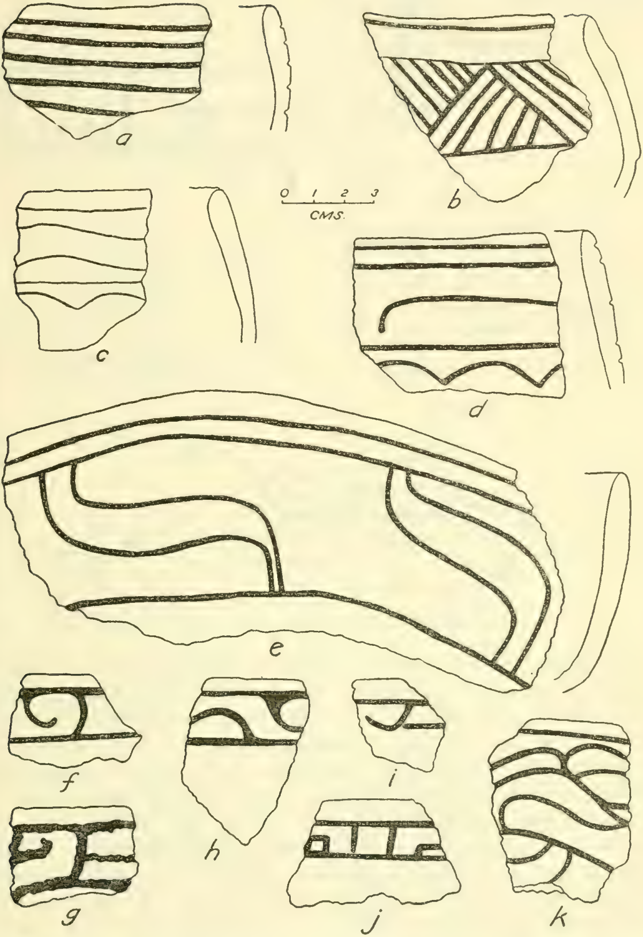
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Figure 25.—Coarse Buff ware sherds with incised decoration. *f-g*, Postfiring incising; remainder, prefiring incising.

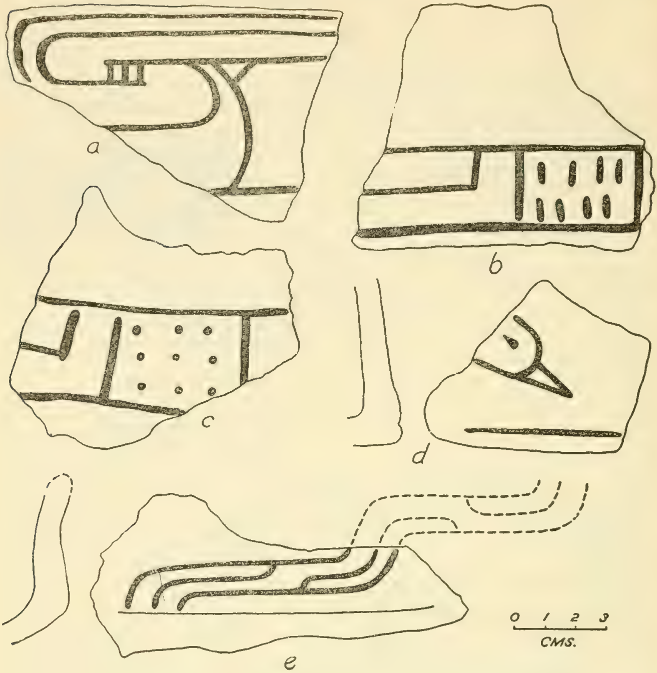

FIGURE 26.—Coarse Buff ware with prefiring incised decoration.

The stamping techniques range from what appears to be rocker stamping, possibly made with a mollusk shell of some kind, to judge by the varying curvature of the instrument used (fig. 28, *a–c*, also Drucker, 1947, pl. 1, *c–e*). On one sherd (pl. 17, *right*), two rows of rocker stamping consisting of short close-set arcs made with a small implement cross at near right angles, suggesting an all-over pattern in this technique. Rocker stamping is not frequent at any level, but the great majority of the examples are of Coarse Buff ware. Other types of stamping include impressions made with the ends of various sorts of blunt to sharp implements (fig. 28, *d–g*). No two vessels so stamped were quite alike in heaviness of stamping or in type of implement used. The sherd shown in fig. 28, *d*, has heavy irregular punctations made with a round-ended tool of some sort; the punctations are not even in size, indicating that the implement was rotated about, or leaned to one side or another, each time it was used. The difference

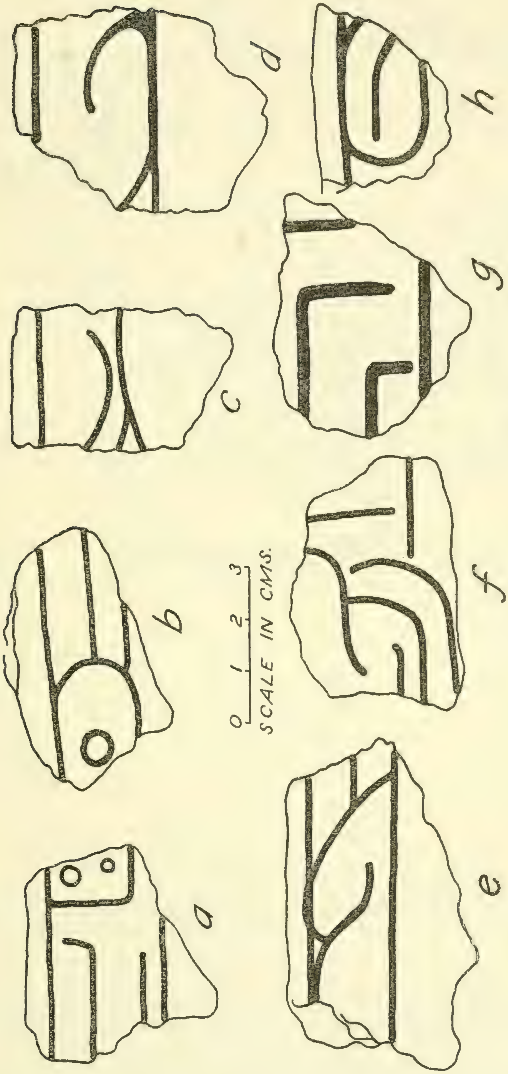
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FIGURE 27.—Coarse Buff ware sherds with prefiring incised designs.

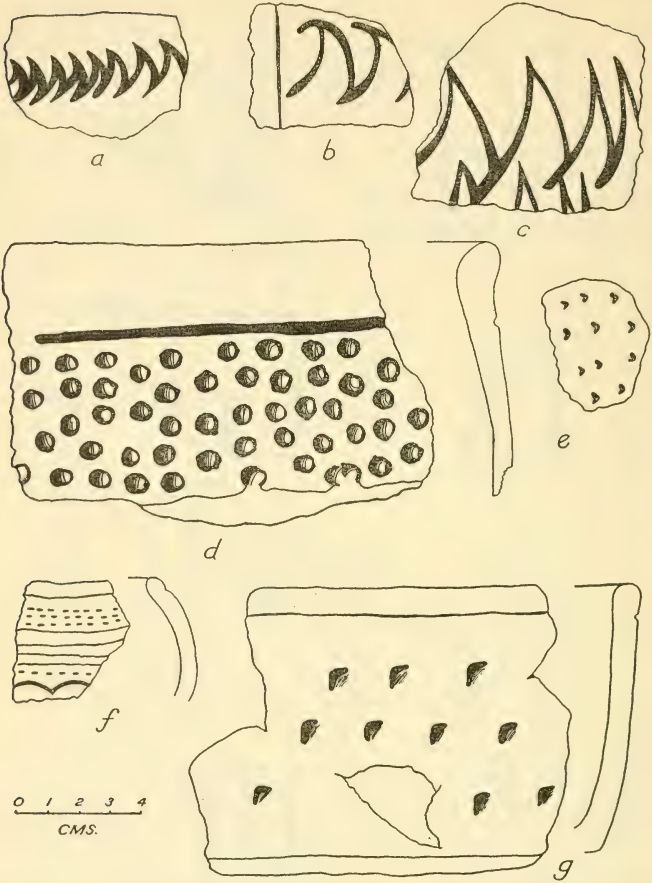

Figure 28.—Coarse Buff ware decorated sherds. *a–c*, Rocker stamping. *d*, Heavy irregular punctation. *e*, Deep (0.52-0.77 cm.) punctation made with awllike implement. *f*, Fine shallow punctation (with incised lines and stamped arcs). *g*, Shallow triangular punctation.

in size of the small deep punctations in fig. 28, *e*, indicate the vessel was given its final smoothing after the decoration was applied, for some of the holes were partly closed in while the clay was still plastic. A very few sherds show punctations that might perhaps have been made with a long fingernail while the clay was soft; at least, they consist of short segments of arc in which the instrument seems to have been pressed inward, then downward toward the arc's center.

Modeled design is extremely rare in the sample at hand. However, two boldly modeled jaguar heads are of Coarse Buff ware (figs. 29, 30, and pl. 18).

Occurrence.—Coarse Buff ware, has not, so far as I know, been reported from any other site. However, a few sherds of it occurred in Middle Tres Zapotes deposits, although I did not recognize them as of a distinct type while working up that material, but thought them off-color fragments, badly eroded at that, of "Unslipped Ollas" (jars, actually), and remarked (1947, p. 5) that Coarse Buff had been found as yet only at La Venta. I noted them recently while making up a type sample of Tres Zapotes sherds from the part of the collections preserved in the United States National Museum, however, and wish to emphasize this correction of my previous misstatement.

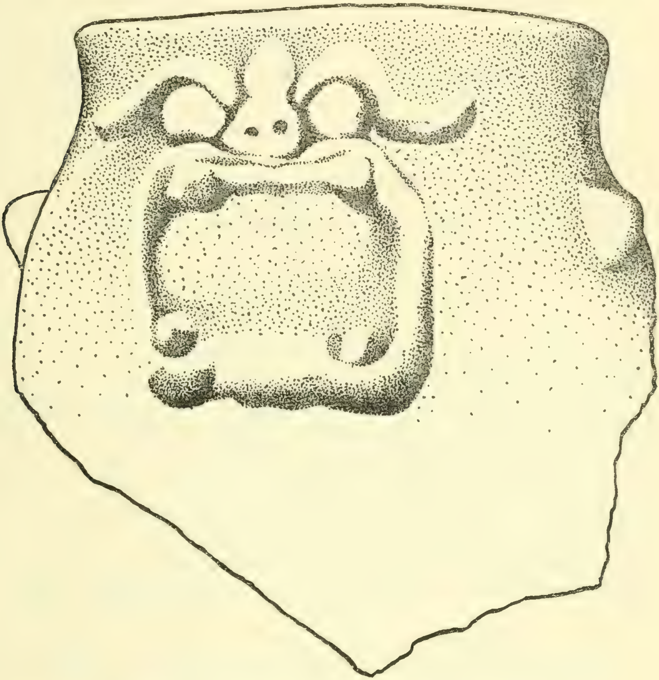

FIGURE 29.—Coarse Buff ware effigy bowl from Complex A.

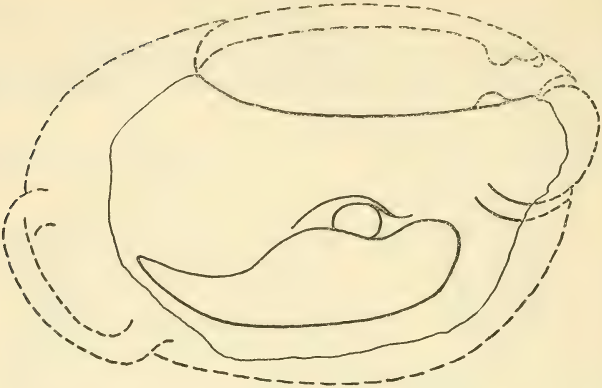

Figure 30.—Suggested reconstruction of Coarse Buff ware effigy bowl, from fragment. (See pl. 18, *a*.)

COARSE BLACK WARE

There are at least two varieties of Black ware in the La Venta series, each with some minor subtypes; it is possible that there may be more. I have divided these sherds into two groups: Coarse Black ware, and Fine Paste Gray-Black on the basis of a noticeable difference between them. It is possible that with the Coarse Black ware I have included various misfired, smudged, and clouded fragments of other wares, as well as White-rimmed (or Mottled) Black ware, all of which might have been distinguished had the type collections consisted of whole vessels or fairly large and well-preserved sherds. As it is, Coarse Black ware includes a variety of miscellaneous odd groups, in addition to the major lot of typical sherds of vessels from which it is named.

Paste.—Coarse Black ware paste appears to be very much like that of Coarse Buff ware, except for the difference in color. A good many sherds actually resemble closely the dark cores of certain Coarse Buff fragments, except for the fact that they are nearly Black (actually, various shades of dark grays) all the way through. Some sherds even have buff overtones, barely discernible over the dark color of the paste. Some of these are perhaps misfired or fire-clouded bits of Coarse Buff vessels, but others were surely meant to be Black ware. The inclusions seem to be chiefly of the same whitish translucent rounded particles as those of Coarse Buff, although against the dark background of the clay they seem much whiter. In most sherds they seem to run to about the same diameters and the same frequency as in Coarse Buff, although in others the particles appear to be slightly finer and no more than of moderate abundance. In a fresh break the inclusions show up strikingly against the dark background. I was unable to note the black plaques or spicules in Black ware sherds, but they may simply be difficult to see.

The texture of the paste is dense; typical fractures are sharp and occur at near right angles to the wall surface. Hardness is nearly the same as that for Coarse Buff ware; the average is somewhere between −3 and 3, that is to say, just slightly less than that of Coarse Buff.

Surface features.—One point that indicates that the Coarse Black ware is a distinct type and not a minor smudged form of Coarse Buff, is that although the paste seems to be very similar, surfaces are better preserved, on the whole, being evidently more resistant to chemical action in the soil than Coarse Buff sherds. So far as one can tell, no slip was applied to the vessels; instead, they must have been coated while still damp with the same type of clay as that used in the paste. The surface was compacted by smoothing and polishing so that the aplastic inclusions were covered, and a smooth even surface, or surfaces, resulted. Some well-preserved sherds still have a moderate luster. The hardness of such sherd surfaces is the same as that of the paste.

Decoration.—In addition to the incising of encircling lines, in groups of from one to three, about the rims of Coarse Black ware vessels, a few sherds bear other types of decoration (pl. 20, *a*, *g*, *h*). Bands of hachure occur in a few cases (fig. 31, *a*); and several sherds are decorated by punctations stamped in with a pointed stick or

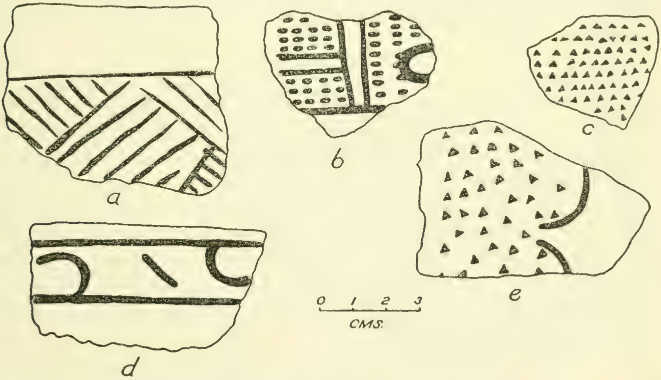

FIGURE 31.—Coarse Black ware and Coarse White ware decorated sherds. *a-c*, *e*, Coarse Black ware, prefiring incised and punctate designs. *d*, Coarse White ware, prefiring (preslip) design.

similar implement while the clay was still soft (fig. 31, *b*, *c*, *e*). A few other sherds have lineal patterns, incised prior to firing. There are no rocker-stamped specimens of this ware in the collections. By and large, decoration is rather infrequent.

WHITE-RIMMED (OR MOTTLED) COARSE BLACK WARE

In the Tres Zapotes collections there was a fairly constant percentage of rim sherds of vessels, usually open bowls or dishes, that were fired so as to have whitish (very light buff, or light gray, to white) rims, while the rest of the vessel was black. In all other respects these pieces seemed to belong to the Coarse Paste Black ware. At La Venta, similar light-rimmed sherds are found. However, they appear to be more varied, for while at Tres Zapotes nearly all seemed to derive from the Coarse Black ware (there was a small proportion apparently made from Coarse Brown ware), these La Venta rims come from Coarse Black ware, Coarse Brown ware, Fine Paste Gray-Black ware, and also Fine Paste Orange-Buff ware (in which the rims become orange or buff in color). In other words, the special technique by which the light-colored rims were produced (Miss Shepard tells me they could have been made by inverting the unoxidized or smudged vessels, after firing, over a smokeless fire for a short time), was not restricted to a particular form nearly as closely as at Tres Zapotes, but was applied to all the common wares. For the purposes of sherd counts, I was forced to include such rims with those of the Black ware to which they seemed to belong; that is, with Coarse Black or Fine Paste Gray-Black, because the body sherds could not be distinguished from others of those classes, and the relatively small number of rims would disappear from sight in percentage tables.

COARSE BROWN WARE

Coarse Brown ware was the most abundant ceramic type throughout the period of occupation of the site. It is very similar, in general, to the ware I designated "Coarse Paste Brown ware" (proper) at Tres Zapotes, although a few points of difference occur. One of these relates to slip color: although the range of colors is the same, the La Venta Brown ware sherds as a whole tend to run to drabber hues of brown whereas the Tres Zapotes color frequency tends to the orange hues. There are other differences as well, but confronted with a few Coarse Brown ware sherds only, one would be hard put to tell those of one site from those of the other.

Paste.—Paste color ranges through a wide series of browns, but tends to cluster about Vinaceous Tawny, 11″ and Orange Cinnamon, 13″. Dark cores, varying from 30 to 50 percent of the total thickness of the sherd in width, range from shades just slightly darker than those of the outer walls to a variety of dark grays, closely approaching black.

Aplastic inclusions are moderate to heavy in abundance (from perhaps 20 percent to over 30 percent of paste volume). They consist for the most part of light gray to whitish rounded translucent particles, possibly quartz or quartzite stream sand, mostly fine to medium in size, with small amounts of coarse, and even very coarse particles of the same kind. It seems clear that these inclusions are of the same kind as those of Coarse Buff ware paste, although the shiny black plaques are only rarely to be noted in Brown ware. I noted a very few sherds with what I first took to be bits of sherd temper, but which are probably particles of small concretions from the local sandstone. No definite evidence of sherd tempering was noted.

Coarse Brown ware paste texture is typically granular and friable. Fractures are often irregular and ragged. Hardness ranges, in the present condition of the sherds, from −2 to +3.5, with the average being about +2. On excavation many of the sherds were but little harder than the clay in which they lay and had much less tensile strength. It seems doubtful that the vessels of this ware would have been useful, not to say durable, had they not been harder originally than their fragments are now, even after drying. However, it seems likely that even at best the ware was softer than Coarse Buff, for Coarse Brown ware vessels were consistently made with thicker walls than those of the former ware.

From all levels, there appeared a small percentage of sherds which in color and tempering appeared to fall into the Coarse Brown ware type, but which differ by being thinner, considerably harder than average, and containing a higher proportion of very coarse inclusions that often protrude or make bulges on the surfaces. I consider them at present to represent merely an extreme form within the normal range of Coarse Brown ware, and have so counted them, but it is possible that a series of better preserved sherds and restorable vessels will show them to form a distinct type.

Surface features.—Coarse Brown sherds range through a series of tones in the vicinity of Orange Cinnamon, 13″, (from Light Vinaceous Cinnamon, 13″d to Mikado Brown, 13″i), and through a series of hues likewise on either side of Orange Cinnamon: from Testaceous, 9″, to Cinnamon, 15″, with a strong trend toward drab hues, Wood Brown, 17‴ Avellaneous, 17‴b, Drab, 17⁗. In most cases the surface color is the same, or grades imperceptibly into that of the paste; part at least of the tendency toward darker and drabber hues of the surfaces is probably due to use or exposure, or both.

In hardness, well-preserved surfaces average about the same as the paste in this ware; if there is any difference, it is that the surfaces are faintly harder. They are typically even, except on the interior of vessels with restricted orifices. There are a few jar sherds, however, that resemble the Tres Zapotes Brown ware "Ollas" and "Unslipped Olla" (jar) type in having raked exteriors. This type of surface is much less frequent in the La Venta collections than at Tres Zapotes. Most exteriors, and the interiors of open-mouthed vessels, were well smoothed, so that the sherds are slick to the touch. Only the thin hard variants mentioned as representing the extreme of variation of Coarse Brown ware paste type are rough or even granular on the surface. Even the smoothest and best polished sherds are dull, or at most, only slightly lustrous.

It has been stated that Coarse Brown ware does not seem to have a true slip. Rather, the vessels would seem to have been given a final wash, while still damp, of finely divided clay of the same type as that used for the paste. I was unable to distinguish a definite slip layer with the aid of a hand lens even in the case of well-preserved sherds. The surfaces of coarse Brown sherds tend to erode heavily, although somewhat less than in the case of Coarse Buff ware. The reason for this difference is not apparent; one would expect the harder Coarse Buff to have withstood erosion better.

Decoration.—The very few fragments that seem to be of this ware, or closely allied to it, with painted decoration are discussed separately. As for incised decoration, the description of techniques and types of patterns applied to Coarse Buff applies with little modification to Coarse Brown ware. The most frequent ornamentation consisted of the hastily drawn incised lines encircling the vessel mouth; more elaborate patterns are infrequent. A series of prefiring incised patterns or rather fragments of patterns, appears in figure 32, *a*, *d–i*. Rocker stamping occurs on a very few sherds in this ware, as does punctate design; both varieties of ornamentation are even less frequent in Coarse Brown ware than in Coarse Buff. Miscellaneous fragments carrying what appears to have been elaborate linear patterns, mostly applied prior to firing, are of nearly the same abundance as in Coarse Buff. Whether some of them were actually representative or not cannot be made out from the material at hand. A typical series is shown in fig. 32.

Three Coarse Brown ware sherds, of the entire lot, show what appear to be textile impressions (pl. 22, *d*, *e*, shows the clearest of these). Such a low incidence is probably to be interpreted as indicating accidental or experimental attempts to vary surface treatment that never attained popularity.

Occurrence.—The marked similarity between La Venta and Tres Zapotes Coarse Brown wares has been remarked. Wider ranging comparisons are difficult, because from many sites we have little informa-

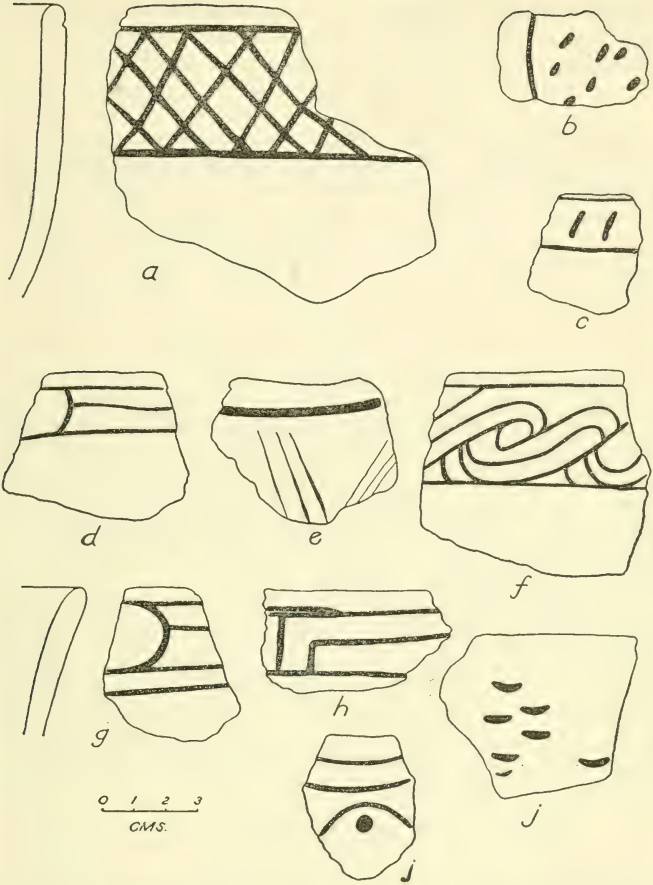

FIGURE 32.—Coarse Brown ware decorated sherds. *a*, *d-i*, Prefiring incised decoration *c*, *j*, Thumbnail (?) impressed design. *b*, Punctate and incised design. Circular area in "*i*" is prefiring perforation (for suspension?).

tion on the common household wares, but it would appear that this sort of ware had a very wide distribution among the early lowland cultures as far north as central Veracruz. It can hardly be taken as a time marker, for at Tres Zapotes we have clear evidence that its use persisted from the "Middle Culture" times of Lower Tres Zapotes throughout the occupation of the site. It seems likely to have been a part of the basic Middle Culture pattern, for it is in certain forms of this ware that the Lower Tres Zapotes-Early Uaxactun parallels find expression.

COARSE WHITE WARE

Coarse White ware is, just as was the case at Tres Zapotes, a variety in which vessels made of Coarse Brown ware pastes were given a slip of "white" color. I have been unable to detect any significant differences in the paste of La Venta Coarse Brown and Coarse White wares. The description of the former paste type applies to the ware under discussion here.

Surface features.—Over the paste, in the case of these vessels, was applied a thick slip of light buff color, almost white (most of the specimens checked against the color scale were lighter than Cartridge Buff, 19″f). It may be that originally the slip was a clearer white, but that it took on the darker buff tints from the soil matrix. The thick slip is usually slightly softer than the paste (which has the same average hardness of Coarse Brown ware paste; 2), only rarely being harder than −2. It is quite smooth, and sometimes attains a slight luster. Chief defects of the slip are its softness, indicated by the fact that it tends to abrade readily. Many Coarse White sherds have only bits of their former all-over slip adhering to them here and there. The slip does not peel, craze, or spall.

Decoration.—Apparently the smooth white surface was not felt to require decoration ordinarily, for but few of the Coarse White sherds bear designs of any sort. Occasionally, encircling lines about the vessel mouth, or infrequently more elaborate designs, were incised on the vessels prior to slipping (fig. 31, *d*). Designs engraved through the slip, after firing, are quite rare. So far as can be determined from the present sample, painted designs were only very rarely applied to the white slip. (See p. 104.)

COARSE RED WARE

Small amounts of Coarse Red ware appeared in most of the levels. It is possible that originally there was a larger proportion of sherds of this ware, but that part of them through action of soil acids have lost their color, along with most of the original surfaces. Such sherds would be indistinguishable from eroded Coarse Brown ware sherds, for the pastes were the same.

Surface features.—Coarse Red ware vessels seem to have been made of the same materials as Coarse Brown ware, as has been remarked, and then given a thin wash of a strong red paint. Unlike the Tres Zapotes Red ware, crystals of specular hematite are very infrequently seen on the La Venta examples, although the color of the paint itself is often as strong a red as any seen at Tres Zapotes. The most common hues are those close to Prussian Red 5′′k, however. Some sherds have a color tending even more toward brown; these seem to be those in which the color is the fastest and best fired on; the stronger and brighter the red, the more impermanent the paint.

The evenness and smoothness of the surfaces of these vessels differ in no respect from that of Coarse Brown ware. Because of the thinness of the coat of red coloring matter, it is quite lusterless. No hardness measurements could be made of the red paint, as distinguished from the outer layers of the paste.

Decorations.—Coarse Red ware was very seldom decorated in any way. One or two sherds with postfiring engraved patterns were noted.

BROWN LACQUER WARE

I have applied the term "lacquer" to this ware to stress its distinctiveness from the ordinary Coarse Brown ware of the site. The contrast between the thick, often glossy, or else noticeably crazed slip, and the base paste gives the effect of a lacquer paint, although of course the slip is a clay, not a true lacquer.

Paste.—Brown Lacquer ware paste is somewhat variable in color and possibly in constitution, but most commonly is a rather bright reddish-brown hue. Pinkish Cinnamon, 15′′b, is a common color, with most of the variants being in nearby tones and hues: Light Pinkish Cinnamon, 15′′b, Vinaceous Cinnamon, 13′′b, and the like, being fairly common. Roughly half the sherds have a heavy core 30 to 50 percent of the thickness of the sherd in width, ranging in color from olive brown to very dark grays (nearly black).

Inclusions vary both in kind and in abundance. Most, if not all, the sherds of this ware contain what appear to be the same whitish translucent water-rounded fine to medium particles as are found in Coarse Buff and Coarse Brown. The amount of this material varies from sparse to heavy. In sherds in which there is but a slight amount of these particles, there are in addition dark, nonlustrous, angular particles, also ranging in diameter from fine to medium. Very few sherds contain dark (nearly black) and red-brown particles of low hardness which may possibly be bits of sherd. The low frequency of these suggests however, that if the inclusions are bits of sherds they are more probably accidental inclusions, rather than the result of a deliberate habit of sherd tempering.

The texture of the paste is quite granular and friable. Fractures are irregular and rough; the paste tends to crumble at the point of fracture rather than break cleanly. The hardness of the samples tested is so low that one wonders if they have not consistently deteriorated in the ground; it is difficult to imagine serviceable vessels being so soft. But few sherds attain a hardness of +2; the majority are −2.

Surface features.—Brown Lacquer sherds have a very typical bright reddish-brown color, close to what a horseman would call a "bright sorrel." The majority are in the neighborhood of Ferruginous, 9′i, and Kaiser Brown, 9′k, with a few examples running from Terra Cotta, 7″, to Apricot Orange, 11′, Hazel, 11′k, to Vinaceous Tawny, 11″. The slip is very consistently harder than the paste, averaging +2 with a few examples reaching +2.5. Its usual thickness ranges from 0.1 to 0.2 mm. It seems to have been laid on in an even coat over the smoothed vessel surface, and given considerable polish. A pronounced crazing, amorphous in type and varying from fine to minute, is typical, but in the few sherds in which this crazing is absent or poorly developed the slip has a marked waxy sheen, suggesting that originally it may have had a high luster. Even where some crazing has developed, luster often may be noted. Where crazing is advanced, the scales of slip detach entirely from paste.

Decoration.—A small proportion of the sherds carry incised decoration. In some cases this consists in wide shallow grooves incised prior to slipping; in others, designs were engraved subsequent to firing, through the slip (Drucker, 1947, pl. 1, *f*).

Occurrence.—I am not aware of the occurrence of Brown Lacquer ware at other sites. It does not occur at Tres Zapotes, or at least, not in noticeable amounts; the "lacquerlike" ware referred to in the description of Tres Zapotes wares (Drucker, 1943 a, p. 48, ftn. 18), has a quite similar slip, but the paste is typically light tan or very light buff. It is likely that the two forms are related, but they cannot be regarded as identical.

FINE PASTE WARES

The wares included under this heading need some general discussion before they can be treated individually. In classifying the Tres Zapotes material, I came on a group of wares which shared certain common features, setting them apart as quite different from the wares made of coarse pastes (with considerable aplastic inclusions). One conspicuous feature of all of these distinctive wares was that they were made of a finely divided very compact paste which seemed to contain little or no visible aplastic material. There were occasional sherds that did have visible inclusions, but these were always apparently different from the common inclusions of the coarse paste wares, and in most other respects these aberrant sherds were like the rest of the "untempered" group, so they were included as accidental variants. All these fine paste sherds were noticeably harder, thinner, and less porous than those of the coarse paste type.

It was also noted that there was a cleavage in typical vessel shapes, the fine paste pieces commonly occurring in a number of forms which did not recur in vessels of the other paste. Within the fine paste group, on the basis of paste and surface colors, a number of subdivisions could be sorted out. There were sherds of orange-colored paste (either orange through and through, or with a gray core) and bright orange surfaces; another lot had light to dark-buff paste color and surface color; a third group was gray from surface to surface (the same steel gray, usually, as that of the cores of certain orange sherds); and still others were of such dark gray as to appear black. In addition, there was a series of sherds of orange paste, or orange with gray core, to which a thick creamy-white slip had been applied.

In certain Upper Tres Zapotes mounds where, because of better drainage conditions, the sherds were in better condition, examples were found of the white-slipped, orange, buff, and gray wares to which painted designs had been applied in red, orange, black, and white. It appeared from the available fragments that the style of the decoration did not vary from one type to another; in other words, the polychrome painting, like type of paste and the distinctive vessel forms, tended to link these wares into a closely related group. However, when I came to the material from the stratigraphic trench I found that although the pastes and vessel forms of the mound materials were duplicated in the upper levels, few of the sherds bore painting, and most of these had only smudges of the various paint colors left, indicating that the paints eroded away or dissolved out rather readily. At this point, I committed a grievous sin against taxonomy by designating the whole group of these fine paste wares "Polychrome wares," although I could not demonstrate that they were ordinarily painted during the Upper period, in which they attained their maximum abundance, much less that they had ever been painted in the Middle period, when they first began to show up consistently in the percentage columns of ware occurrence (a very few fine paste sherds, with no trace of paint—little, in fact, of original surfaces—occurred in the Lower Tres Zapotes series, also). Having thus thoroughly confused the situation, in the Tres Zapotes report, I feel obligated to devote these lines to trying to clarify it somewhat, especially since the question of painted decoration is important to the placing of the La Venta material.

The following facts describe and trace the development in the Tres Zapotes wares which I previously miscalled "Polychrome wares," and for which I prefer to substitute the term "Fine Paste wares":

(1) All the pastes, whether orange, buff, gray, or black, are of a finely divided compact material which usually contains little or no visible aplastic; when aplastic particles occur they seem to differ from the sandy inclusions of the Coarse Paste wares.

(2) One ware of this group was finished with a heavy white, or cream–white slip; the others were finished with a compact well-polished coat of the same material as the base clay of the paste. (Miss Shepard has called attention to an additional rather rare variety of slip: of the buff paste, apparently, applied to orange ("red-burning") vessels.)

(3) The several wares of this group share a variety of vessel forms not known to occur in Coarse Paste wares.

(4) Examples of all these wares, (with the exception of Fine Paste Black?) were decorated with painted designs in several colors in the Upper Tres Zapotes period. However, at the same period, unpainted pieces of the same pastes and same forms were also made and used. The exact proportion of the painted and unpainted varieties of each ware is practically impossible to determine on the basis of present collections, for the paints were either perishable or poorly fired on, so that in many cases only smudgy traces of them can be seen.[10]

(5) A very few sherds, in poor preservation but made of the typical fine paste of these wares, occurred in the Lower Tres Zapotes material (that from beneath the volcanic ash horizon); throughout the Middle Tres Zapotes period the wares were consistently present in small amounts, but with a definite trend toward increase (in terms of percent of total sherds from the stratigraphic levels). There is no evidence that painted decoration was applied to them during those periods.

(6) In the Upper period, the Fine Paste wares, painted and unpainted, increased tremendously in abundance. Coupled with this increase is the first evidence of use of painted decoration and also a number of new shape elements, such as the "supported" spout (a spout with a strap or rod of clay from the tip to the neck or rim of the vessel), hollow slab legs, reminiscent of those found on the well-known Teotihuacán tripod bowls, and so on.

(7) It is worth noting that we have a hint of a further step in the evolution of these wares in Valenzuela's material from the vicinity of Catemaco and Santiago Tuxtla, which appears to range in time from near the end of Upper Tres Zapotes to a post-Tres Zapotes epoch (on the basis of the occurrence of a few items of copper found by Valenzuela), for he found numerous examples of these wares with elaborate carved designs, which are very rare at Tres Zapotes, and suggest a line of development toward the Fine Orange ware, which I believe to be the final lineal descendant of these Fine Paste wares. The life history of these wares would thus run from Middle Tres

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[10] The best reproduction of type of painted decoration and colors is to be found in Valenzuela, 1945, Lams. I to III. I do not know what mischance of photography or of processing caused the sad result in Plate 1 of my Tres Zapotes report—but the wares do not actually look as they appear there.

Zapotes (though they may have originated in Lower Tres Zapotes), through the Upper period and the subsequent Catemaco-Santiago Tuxtla phase, and later if Fine Orange actually derived from them.

LA VENTA FINE PASTE WARES

At La Venta, there occurs a group of wares which resemble in many respects the Fine Paste wares from Tres Zapotes, and to which the same general designation is given. There are actually several points of difference, though some of these may be negligible, deriving from the poorer preservation of the La Venta material rather than from any important original difference. For example, orange, buff, gray, and black paste and surface colors are found at La Venta, just as at Tres Zapotes, but it is far more difficult to separate them into clean-cut groups, for orange and buff shade into each other, and so do gray and black. I have guessed, though I do not know if it can be demonstrated, that at least part of the Fine Paste Buff sherds are probably badly leached and discolored Fine Paste Orange, and similarly, some of the Fine Paste Gray may originally have been black, and could they be distinguished consistently, should be referred to as Fine Paste Black. Therefore, while there were probably originally four wares (based on paste and surface colors), plus the locally rare White-slipped variety, in this Fine Paste group, as a practical matter it is possible to show counts of only two: Buff-Orange and Gray-Black. Miss Shepard's examination of a series of Upper Tres Zapotes sherds established the fact, however, that there is a significant difference in composition between the buff-burning and orange-burning ("red-burning") clays, and that while the materials from which the two varieties of pastes were made may have come from different soil zones of the same beds, their firing characteristics were recognized by the potters. My lumping of the two wares may therefore be improper.[10a] The only justification for so doing is the practical difficulties of sorting the poorly preserved sherds. More significant, by far, is the extreme rarity at La Venta of the Cream-white slip used at Tres Zapotes, and also a frequent tendency toward firing (or refiring) rims of certain open bowl and dish forms to oxidize the rims (as was usually done in Coarse Paste Black ware at Tres Zapotes). Likewise important is the fact that no painted decoration has been observed on these sherds at La Venta.

There is another significant difference between the Tres Zapotes and the La Venta Fine Paste wares—that of tempering. Miss Shepard found the La Venta specimens uniformly heavily laden with volcanic ash. The Tres Zapotes series uniformly lacked ash tempering. There may be a temporal change involved for the Tres Zapotes sample consisted of Upper period sherds, selected on the basis of good preservation. It is hoped that it will be possible to check a series of Middle period Fine Paste sherds for this feature.

[10a] Miss Shepard's check on a small lot of La Venta sherds (see Appendix: Technological Analyses) seems to indicate that while La Venta Fine Paste Orange and Fine Paste Buff pastes differ in some characteristics, they are more alike than their Tres Zapotes cognates, and when refired under equal conditions tend to acquire more similar colors.

Fine Paste Buff-Orange.—The buff varieties range from hues just darker than Cartridge Buff (19″f) in unbroken series to Pinkish Buff (17″d) and Cinnamon Buff (17″b). A few tend to drabber hues, such as Avellaneous (17‴b). Some are intermediate between the foregoing and the Cinnamon hues (15); these are the sherds, of course, that might be either off-color Buff, or faded orange. The ware or variety included under "Orange" ranges from Cinnamon (15′) and Pinkish Cinnamon (15″b) to Orange–Cinnamon (13″) to Vinaceous Tawny (11″). Only rarely are pastes of hues as clear and strong as Apricot Orange (11′).

Fine Paste Gray-Black.—The colors found in these sherds range from Mouse Gray (15⁗), and Olive Gray (23⁗b), through darker shades into the near-blacks such as Dark Quaker Drab (1⁗k), Dark Mouse Gray (15⁗k), and in well-preserved "Black" specimens to Blackish Mouse Gray (15⁗m). The real Fine Paste Gray ware is represented by the materials in or near the first group of colors; the Fine Paste Black is made up of those in the second.

Except for the above differences in colors, the pastes of these wares appear to be the same. They consist of finely divided compact clay. However, whereas the typical Fine Paste of Tres Zapotes has little or no visible inclusions, the La Venta material Miss Shepard found to be "characterized by a large amount of volcanic ash. In most specimens it is fine enough to classify as volcanic dust, although in the coarser samples there are scattered fragments that show minute vesicles."[11]

The texture of the paste is quite dense. Some sherds show a definite lamination; there are to be seen, now and then, narrow passages, parallel to the surface of the sherd, where layers of clay have separated. Such apertures do not occur regularly enough to indicate that they are coil joints. Fractures tend to be at abrupt angles with the sherd surfaces, and sharp and clean. Hardness averages about +2.5.

Surface features.—None of these Fine Paste wares show signs of having carried a true slip, except for two sherds from Stratitrench 1 with traces of a heavy cream-white slip similar to that common in the Fine Paste wares of Tres Zapotes. In all other cases, well-preserved surfaces appear to be of the same material as that used in the base paste. Slight differences of tone may be attributed to the compaction of the particles in the polishing process, and occasionally, to stain and discoloration. Presumably this is the reason, for instance, that surfaces of Fine Paste Orange sherds range from Ferruginous (9′) through Apricot Orange (11′) to Zinc Orange (13′), although many run to drabber tones; Vinaceous Tawny (11″) to Orange Cinnamon (13″) to Cinnamon (15″). In the Buff, Gray, and Black forms no considerable differences can be noted between paste and surface colors.

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[11] Shepard, personal communication.

Surface hardness runs about the same as that of the paste. This is true of well-preserved sherds only, of course. In eroded, badly leached pieces, the surfaces are much softer, in fact the outer surfaces seem to lose their bond entirely, the particles of clay coming away readily, so that such sherds will leave marks almost like chalk. This trait gives the sherds a very distinctive "feel" which can best be described as "chalklike." Sherds whose surfaces have not eroded away, however, are even and very smooth. Apparently the vessels were originally well polished, although they had at best only a slight luster.

Decoration.—The Fine Paste wares were much less frequently decorated than the other wares at La Venta. Instances of incised or engraved decoration occur but are rare. Of all the varieties, it seems that Fine Paste Black more often carries decoration except for the very common encircling lines incised about the rims, found in all varieties. There are several fragments of dishes of this ware with a simple pattern formed by incising (?) or stamping a series of arcs (fig. 33; this differs from the "rocker stamping" found on Coarse

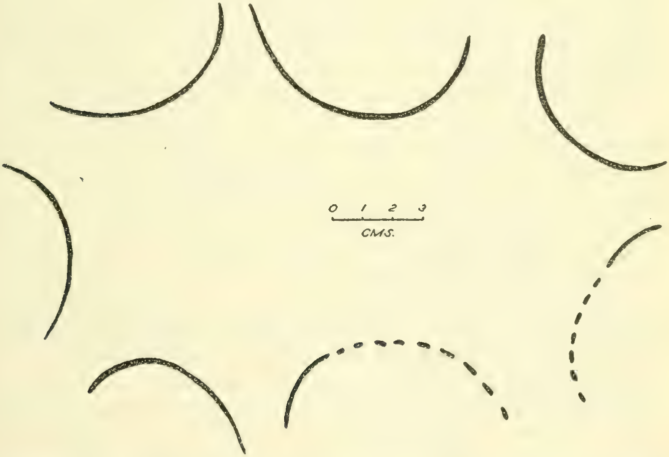

FIGURE 33.—Stamped (?) arc pattern from (interior) floor of Fine Paste Black ware flaring-side dish (bottom circular or nearly so; diameter, 28 cm.).

Paste Buff and Coarse Paste Brown). There are also several sherds in which what seem to have been rather elaborate incised designs were set off or made to stand out prominently by filling the background with light punctations (fig. 34, *f*). Hachure, usually in bands of alternating triangles, is more frequent in Fine Paste Black than in any other ware (fig. 34, *e*). In Fine Paste Orange (figs. 35, 36), there is one unusual fragment, apparently of a small rectangular vessel, which bore a complex pattern, probably representative, to judge by the remaining bits of it, incised with deep narrow lines (fig. 35 and pl. 17, *left*), although on the whole, elaborate linear patterns are not common in any of the Fine Paste wares.

Distribution.—The marked similarity of these La Venta Fine Paste wares to those of Tres Zapotes has been commented on. It seems evident that if they are not local manifestations of the same basic group of wares, they are very closely related, despite some points of difference between them. The type of the paste, which contrasts so sharply with the Coarse Paste wares at both sites, suggests that some special technological process may have been involved in the manufacture of the Fine Paste wares.

PAINTED WARES

This category is frankly a catch-all, meant to provide a place for the very few sherds with traces of painted decoration (fig. 37). Actually, of the 25,000 and some odd classifiable sherds from the two stratigraphic sections, only 25 were found that had some trace of painted decoration. All but one of these sherds appeared to belong to the common local wares, either Coarse Brown, Coarse White, or Coarse Buff, to which designs were applied in heavy bold lines. None of these sherds show more than a single color of paint on each sherd, but as small as most of the sherds are, one cannot be sure that two-color decoration was not occasionally used. One surface sherd was picked up that had a fine-line geometric design in red and black paint; it has since been lost, but as well as I can recall the sherd differed in general appearance (in addition to being painted), from local wares, and may have been an import. The only painted piece found in 1943 was a small vertical-walled dish of Brown ware with a combination of red paint and incising. On the basis of the few painted sherds, such Red on Brown appears to have been the commonest sort of painted decoration—if one may speak of "commonest" with reference to such minute quantities of sherds with painted decoration. A black paint was also used: there are two sherds of Brown ware with traces of black paint, and three of what appears to be the typical local Coarse White ware with lines in a dull black (really a near-black) paint. There are also five sherds of Coarse Buff ware with traces of a paint that

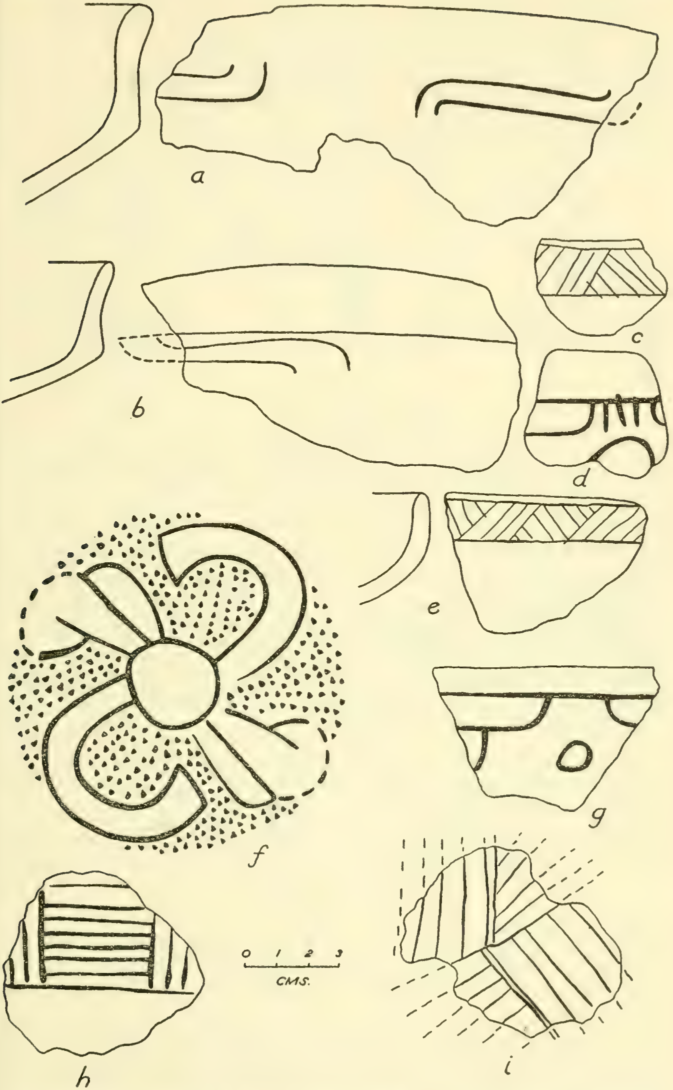

Figure 34.—Fine Paste Black ware decorated sherds. *f*, Reconstruction of design from bottom of small "plate" (see pl. 20, *k*); broken line indicates uncertain portions of pattern.

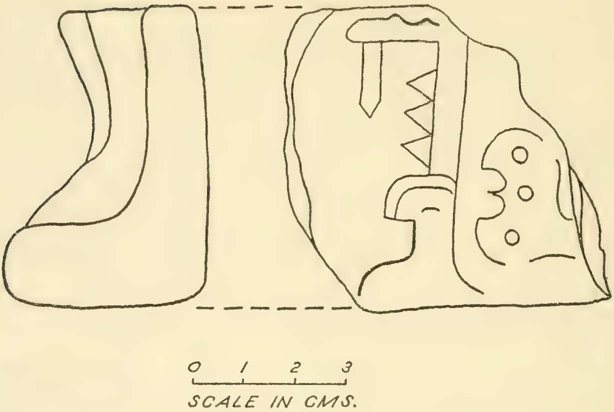

Figure 35.—Profile and end of fragment of Fine Paste Orange ware small rectangular dish, with deeply incised design (see pl. 17, *left*, *a*).

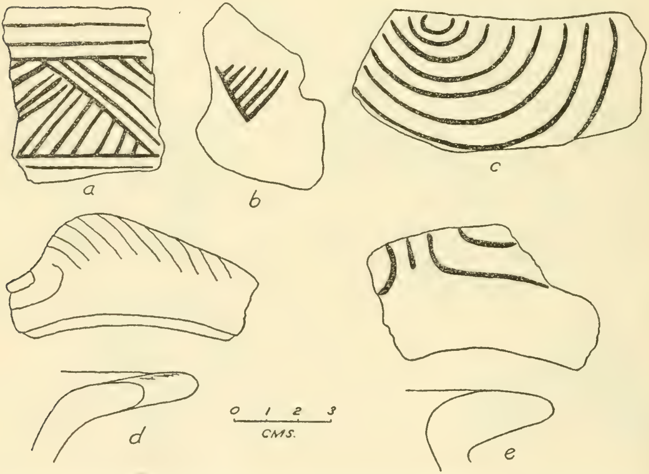

Figure 36.—Fine Paste Orange ware sherds with incised decoration. *c*, May be fragment of an effigy vessel. *d*, Wide everted rim, with tab, of flaring side dish. *e*, Wide everted rim, probably of incurved side bowl.

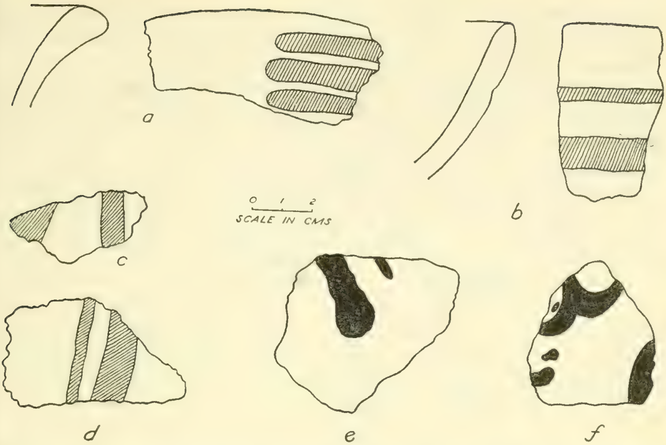

FIGURE 37.—Sherds with painted decoration. *a-d*, Red on Brown. *e-f*, Black on Brown.

seems to be asphaltum. It is possible that these streaks are fortuitous drippings, rather than intentional painting, of course, but they look as though they were applied with a thinner mix of asphaltum than that on some sherds that have very obvious accidental drippings (streaks running vertically down the vessel wall, and of marked thickness).

It is conceivable that a slightly larger proportion of the La Venta sherds may have once borne rudely painted designs—probably normally in one color only on the untreated surface of ordinary local wares—but due to the unfavorable preservation conditions they have been lost. We could hardly expect much to remain of painted designs when the surface of the sherds so often was eaten away. From the few pieces at hand, it would seem that the same or a very similar tradition occurred as in Middle Tres Zapotes, where also infrequent examples occur of designs in red or black paint applied in what seem to have been rather simple and rude combinations of lines.

VESSEL FORMS

Because of the fragmentary nature of the La Venta pottery collections, the number of recognizable vessel forms is limited; it is scarcely to be doubted that there were more than those described in the present section. Furthermore, we have but a scant sample of vessels which on the basis of association can be considered ceremonial pieces. With a larger sample of tomb, etc., pieces, the length of the list could undoubtedly be increased. The following vessel shapes are those that could be reconstructed because of their high frequency in the collections of sherds of cooking and service wares, or less common types of which by chance a complete or restorable example was found. Such difference in abundance will be noted in the descriptions.

All of the more common forms, or at least the common ones that can be recognized from sherds, were made in not one, but in several or all of the wares. To emphasize this integration of the ceramic complex the vessel forms are described in this section, and illustrated in a single figure (fig. 38). To clarify the distribution of these vessel

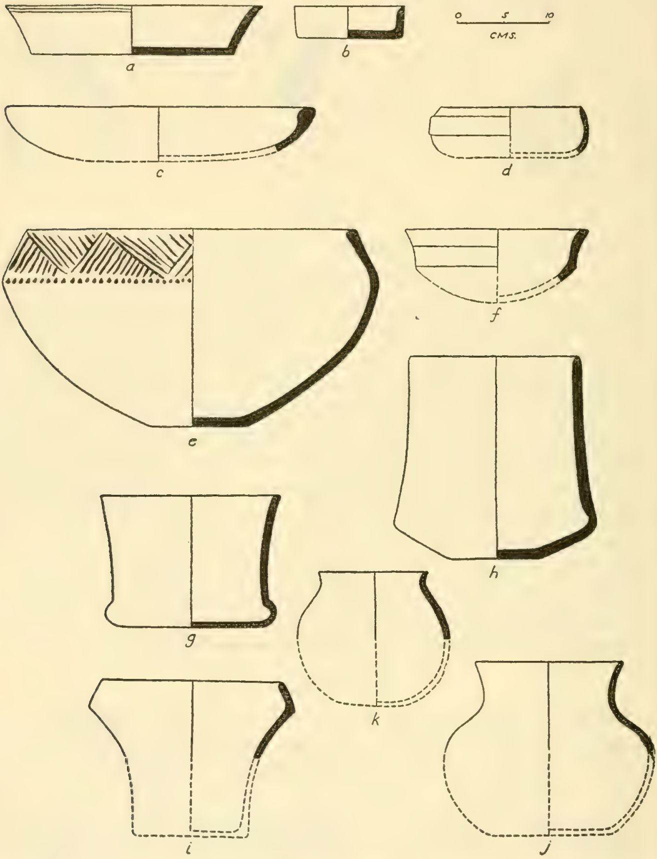

Figure 38.—Common dish and bowl shapes based on restorable and near-restorable specimens.

shapes among the various wares, and to indicate which are abundantly (and recognizably) represented in the sherd collections and which are known from one or a few restorable pieces only (and which may therefore be "sports" in the local pottery tradition), a table bringing out these points will follow the paragraphs describing the vessel forms.

DISHES AND BOWLS

Flat-based dishes with flaring sides (fig. 38, *a*).—There are shallow, flat-bottomed vessels, some of them so wide that they might be considered trays rather than dishes were it not for the unbroken range of diameters down to smaller sizes. The walls join the bases at an angle varying from 110° to 130° (i. e., measured from the base of the vessel). The joint of base and side is usually a fairly well-defined angle on the outside and modified into an arc on the interior surface; in some cases however the joint is rounded up on the exterior also. The sides range from straight to slightly outcurved forms; in the latter the curvature tends to increase toward the rim.

Three rim forms occur in these dishes. The first and most abundant is a simple direct rim that continues the line of the side. In dishes in which the sides are outcurving rather than straight, the rims tend to continue the curvature, or else are slightly asymmetric, which produces the same effect. The next most frequent rims, about 20 to 25 percent of the total rims of this type of vessel, widen rapidly toward the top, and are finished off in a flat bevel, ordinarily nearly horizontal. A rare type of rim is a wide everted one, either nearly flat, or sloping toward the outside. These rims occur in all wares but have a low frequency.

No feet, legs, or handles occur on these vessels. It is possible that some of the dishes may have had low annular bases, but these were uncommon if they occurred. The only persistent modification, and it is an infrequent one even on the rare rim type with which it is associated, is a small tab found on a few wide everted rims. The few examples noted were chiefly on Fine Paste ware dishes.

As remarked, these dishes tend to be shallow. The average height-diameter ratio is 0.19. Rim diameters range from 18 to 38 cm., as well as measurements could be made from series of larger sherds, with the average about 28 cm. Vertical height ranges from 4.0 to 7.5 cm., and averages about 5.3 cm. Wall thicknesses are difficult to measure because most of the sides vary, tapering from top to bottom, or vice versa. It is quite noticeable that many of the bases are thinner than the sides they support.

Ordinarily both interiors and exteriors of these dishes were polished. The degree of luster depended of course on the ware. There is a fairly constant type of decoration associated with these flat-based dishes, in all wares, though one must admit that it requires a charitably lax extension of the term "decoration" to class it as such. This embellishment consists in a group of from one to three circumferential lines, incised prior to firing, about the rim of the dish. On pieces in which sides and rim curve outward, the lines are usually on the interior of the rim; on straight-sided pieces, about the exterior. The thickened beveled rims often carry the lines on the flat lip, and the wide everted rims usually carry such lines on their upper surface. The lines are usually slightly irregular freehand circles drawn in a hurried or careless fashion. Rarely, greater complexity of design was introduced by breaking one or more of the lines, or turning them outward to intersect the rim at one or more points. The wide everted rims tend to carry wide shallow grooves (up to 0.2 cm. wide) rather than the narrow triangular cuts of other rims. This type of ornament is found on 30 to 40 percent of the fragments of these dishes. Infrequently, a line or two was also applied on the exterior just above the base. More complex designs are rare, being found on less than 2 percent of the sherds of this form.

In all wares, this type of dish was one of the most frequent, at least as far as can be made out on the basis of sherds.

Without wishing to contradict myself in regard to the universality of this vessel form among the La Venta wares, it should be noted that a slight divergence from the standard form may be noted in examples made of Fine Paste ware, although many conform in all respects to that described. There are a few however that tend to vary the typical proportions, having a height–diameter ratio closer to 0.25, and, with their thinner walls and base (since Fine Paste ware characteristically runs thinner than the coarse paste varieties), produce a somewhat different effect. The exterior angle more often tends to be rounded off well up into the side than in the dishes of other wares, also. Nonetheless, these pieces cannot be set apart as forming a separate class, for they are simply extremes of a series that ranges from forms, point for point conforming to the type described.

This very simple vessel form, with slight variations, perhaps, in proportions (and with the frequent addition of feet and legs), appears to be common throughout Mesoamerica from early to late times. More specifically, comparison may be made with the Tres Zapotes material, in which these dishes were also common. However, the thickened beveled rim-form is not typical of any Tres Zapotes period, and the wide everted rims are rather more common there than at La Venta.

Small flat-based dishes with nearly vertical walls (fig. 38, *b*).—Small flat-based dishes with low nearly vertical walls, finished off in simple direct rims, appear infrequently in most La Venta wares. In some, the exterior angle at the joint of sides and base is rounded off until the vessel loses its crisp profile. No modifications are known. The rim diameter of the few measurable pieces ranges from 10 to 16 cm.; vertical height from 3.0 to 3.9 cm. Both interior and exterior surfaces are smoothed. Decoration is infrequent. One Fine Paste Black ware example has a complex design on the base, which suggests the possibility that these pieces might have been meant for lids for other vessels, rather than as containers.

Open curved-side dishes with thickened rims (fig. 38, *c*).—This classification is based on a series of rim sherds; the form is only conjectural. If the estimates of rim diameter based on the measurable pieces is correct, and if the line of the sides continued without drastic change of direction, these must have been wide shallow dishes, or trays. From available sherds, the sides seem to have merged into the base with little or no change of direction, although it is possible that some may have had flattened bottoms to make them steadier—there are some basal fragments (without sides or rims), with a small flattened area at the bottom. There are also a few fairly typical rim sherds in which there is a slight but noticeable increase in curvature on the side (or between side and base); had we enough restorable specimens a separate subtype might be defined by this difference. The rims are very distinctive: they thicken rapidly toward the lip, chiefly by addition of clay on the interior (i. e., without altering the trend of the exterior curvature), and are usually finished off in a flat bevel, nearly horizontal in direction.

No handles, legs, etc., are known to occur on these vessels.

Measurable sherds indicate a range of rim diameter of from 30 to 40 cm. Estimates (probably I should say guesses) of vertical height average between 5 and 6 cm.; if the bottoms were slightly flattened, height would be decreased slightly. Thickness of wall of a small series averages 0.5 cm., while the rims at point of maximum thickness average 1.7 cm.

Both interiors and exteriors were smoothed. A few pieces carry cursorily incised lines (cut prior to firing) about the exterior just below the lip, or on the flat lip itself. Such decoration is not common however. These vessels have a low but consistent frequency, a few examples being found in most wares and from all levels.

Dishes with open-curved to in-curved sides (fig. 38, *d*.)—There are a considerable number of sherds in the collections that seem to come from wide shallow vessels with sides that curved, either to an open mouth, or curved in slightly to form a restricted orifice. Bases vary from gently rounded to flat. These sherds are consistently thinner than those of, for example, the flat based dishes with flaring sides. It is of course probable that some of these sherds are from bowls whose total form differed considerably; it is not possible to separate what seem to have been two quite distinct form types. Enough reconstructable fragments occur however, to enable us to define both, even though we cannot assign a good many sherds to one or the other.

The rims are nearly always simple and direct. A few are thickened slightly on the interior, presumably for strengthening the vessel, and in infrequent cases a flattened bevel may be noted on a lip.

No handles, feet, or legs are known on these dishes. Provisionally, on the bases of the few restorable pieces, I am classing a subgroup with low annular bases as bowls, but it may be that some of the shallow dishes had this feature. A moderate but fairly constant proportion of the sherds have a raised band, 1 mm. or so high and from 1.5 to 3 cm. wide, encircling the side, either just below the rim or near junction of side and base. Instead of this wide band, other vessels have a low narrow band, or small flange (0.2–0.3 cm. wide, and in the neighborhood of 0.2 cm. high) encircling the wall. In a few rare instances, these narrow bands were notched at closely spaced intervals.

Rim diameters range from 12 to 28 cm., averaging 19 cm. Height could not be accurately determined in most cases, but is believed to have averaged from 4 to 6 cm. Wall thickness averages 0.6 cm.

Both interiors and exteriors were smoothed, and well-preserved pieces show traces of moderate polish. Decoration most frequently consists of the monotonous encircling line or lines just below the lip, incised before firing.

An aberrant variant of this type is similar in most respects, except that it is small in size, and is elliptical in plan rather than round. Only one such specimen was found in the collections, although of course small sherds from such pieces might pass unnoted.

This type of vessel and/or the bowl with similar upper side and rim forms a common element in all wares and at all levels. The form itself is so simple that a wide range of comparisons hardly seems significant. Someday, perhaps, when we have a series of complete specimens from La Venta it will be possible to make more extended comparisons.

Small rectangular dishes (pl. 17, *left*).—Only a very few vessels of rectangular form were found; they are striking, however, because of the general scarcity of such vessels in the area as a whole. Two had vertical walls, one had flaring walls. All the fragments found indicated that they were quite small. Two of the specimens had very thick walls. One of the specimens, of Fine Paste ware, has what appear to be the remnants of an elaborate incised design (fig. 35); another, of Coarse Buff ware, had the sides and ends set off into panels by means of lines incised about the margins of these areas before firing.

Incurved side bowls with angular (?) or rounded shoulders (fig. 38, *e*).—There are a variety of types of rim sherds which seem to come from rather large bowls. On the basis of the occurrence of a restorable specimen, and a few sherds that show traces of angular shoulders, I have grouped all these bowls together in a single category. A sizable proportion of the rim sherds are from 4 to 6 cm. long, as though this were the common distance below the rim for an angular or rounded shoulder, which being structurally weaker was a common point of fracture. A restorable vessel with such a shoulder had a major fracture line almost exactly at this point, and in only two or three of the fragments of the rim and upper side was there a trace of the angular joint to be seen. The postulated body shape of this type, therefore, is one in which the upper portion of the side curved inward at a moderate to a strong arc; it joins the lower side (or the upper edge of the base, however one thinks of it) either in a rounded shoulder, in which there is a marked change of curvature below the joint, or in an angular joint, in which case the change of direction of line, or degree of curvature, is even more pronounced. With more complete vessels to work with, we might be able to divide this type into subgroups on the basis of type of shoulder. The lower side and base (or simply the base) curves downward to a slightly flattened bottom, or in some cases a rounded bottom set on a low annular support. The type with the annular support should be considered a subtype apart from the unmodified pieces.

There are several types of rims associated with this form. The first is simple and direct, or slightly thickened and direct. Such rims cannot be distinguished from those from the dishes with incurved sides described some paragraphs back. Another variety of rim is one which is slightly thickened and turned upward, not being carried far enough upward to be called a neck, however. A third variety consists of markedly thickened heavy rims, also turned vertically or nearly vertically. These often have a flattish bevel or lip. Another class consists in returned rims that flare outward. The final group, the most abundant, are of heavy (averaging 1.4 cm. thick) everted rims.

A presumably aberrant variant of this type of bowl was one found in 1943, which has a low annular base and a wide returned, almost an everted rim, which instead of forming a circle was made in a spiral. That is, the whole mouth of the bowl is asymmetric; the rim rises in a clockwise direction so that there is a jog or vertical break where the high and low ends come together. The general effect is that of the shell of some univalve. (See fig. 41, *d* and pl. 19, *f*.)

Returned side bowls with angular shoulder (fig. 38, *f*).—These vessels might be considered a subclass under the preceding type. I have chosen to set them apart to call attention to their occurrences elsewhere. The shape is an open one: the sides lean in very slightly, as a rule, above the angular shoulder, then turn through an abrupt arc to flare widely. Rims are usually simple, and continue the curvature of the upper part of the side. Sometimes the rims are slightly thickened at their base, then taper, often asymmetrically to the lip, thus apparently increasing the flare of the upper side. This is the same shape that I called the "composite silhouette" in discussing the material from Tres Zapotes.

These vessels seem to have been wide and rather shallow; some of them may have been on the borderline between dishes and bowls. Rim diameters range from 20 to 44 cm.

This vessel form is not common, but appears in nearly all wares, and in nearly all levels at La Venta. It is interesting that it is slightly more common in the Fine Paste wares than in the Coarse Pastes. The opposite was true at Tres Zapotes, where this shape was found in the Early and the Middle horizons, and almost exclusively in the Coarse Paste wares (Brown ware, Black ware, etc.).

Bowls with basal bulge, and concave (inleaned and returned) sides (fig. 38, *g*).—This group of bowls is based on a small number of sherds complete enough to show the form of the entire vessel; however, it is probable that many rim sherds which show a side more nearly vertical than that of the flaring side dishes should be included here. The bowls are rather squat in proportion, with a pronounced bulge at the joint of sides and base, and a gently concave side. Rims are simple and direct. The rim diameters of the measurable specimens range from 14 to 26 cm.; the estimated heights from 11.5 to 17 cm. The average height diameter ratio is 0.73.

These vessels resemble closely a group from Tres Zapotes (cf. Drucker, 1945 a, figs. 35 and 36), despite the fact that I miscalled the Tres Zapotes forms "jars" and that some of them have rather complex silhouettes.

A related form, represented by a complete vessel from Stratitrench 3, instead of a completely flat base from the turn of the basal bulge, slopes at a low angle to a small flat central area. Sherds of such bowls could not ordinarily be distinguished from those of the flat-based bowls unless they were large enough to show the complete form, or at least the complete base and a part of the side. The complete example is 22 cm. in height, with a rim diameter of 18.7 cm. and a maximum diameter (at the basal bulge) of 22.2 cm.

Flaring bowls with sharply incurved sides (fig. 38, *i*).—A type of small bowl in which the sides flared strongly from a small flat base, then curved in sharply, often through an angular break in line, to a constricted mouth, is indicated by a number of specimens. The rim is ordinarily direct, and slightly thickened. Decoration is not common, although occasionally a few circumferential lines were incised before firing.

The shape is markedly reminiscent of one that became popular in Upper Tres Zapotes, where it was common among the Fine Paste (formerly called "Polychrome") wares. The heavy thickening of the rim that is so characteristic of the Tres Zapotes vessels is not seen on the La Venta specimens, however.

Bowls with incurved returned sides (fig. 38, *j*, *k*).—This designation covers a somewhat variable group of vessels, to judge by the incomplete mouth portions in the collections. The sides curve inward toward the orifice with a regular curve then are returned to form a low neck. In some cases the returned portion seems to have been relatively longer, and probably gave a rather different over-all form to these pieces. Rims are simple and direct (unless in some cases the entire returned portion be considered rim). Body form is unknown, although the curvature of the upper fragments of sides suggests that it may have been more or less globular.

There is no evidence of the application of any appendages to these bowls. Proportions are not known, because of incompleteness of specimens: those indicated in the figure referred to are purely hypothetical, arrived at by continuing curvatures of upper portions of the sides of a series of sherds, without allowing for any shoulders or breaks of line. Rim diameters vary from 10 to 20 cm.

Exteriors were smoothed and polished; interiors were invariably smoothed, and sometimes polished. Decoration was rarely applied to these bowls.

Cylindrical bowls (pl. 19, *c*, *d*).—In 1943, among the few pieces of pottery found, were a number of vessels having the form of squat cylinders; in some of them the sides may have had a very slight flare. They were either so badly eroded and leached that they could not be preserved or were among the pieces in the pottery cache destroyed by vandals. I judge most of them were Coarse Buff ware; some may have been Coarse Brown, from the descriptions. There is no indication that they are to be related to the widely spread "Teotihuacán cylindrical tripods" for, in addition to lacking any kind of supports, these vessels lacked the characteristic convexity of profile of the side walls, and had no basal band of ornamentation or applique. They were thick-walled, and dumpy in their proportions.

JARS

Discussion of the various forms of jars is hampered by the scarcity of restorable specimens. It is difficult to do more than guess at body forms; the few examples we have are rather varied. For this reason a provisional classification will be outlined here on the basis of form of mouth and neck, supplemented by a few comments and speculations on body form. The varieties of jar rims and necks in the sherd collections show the following range in form: neckless, with thickened direct rims; inleaned necks; concave (inleaned and returned) necks; very tall slender concave necks.

Neckless jar rims, with thickened direct rims (fig. 39, *a*).—The portions of the sherds joining the rims indicate that the vessels were

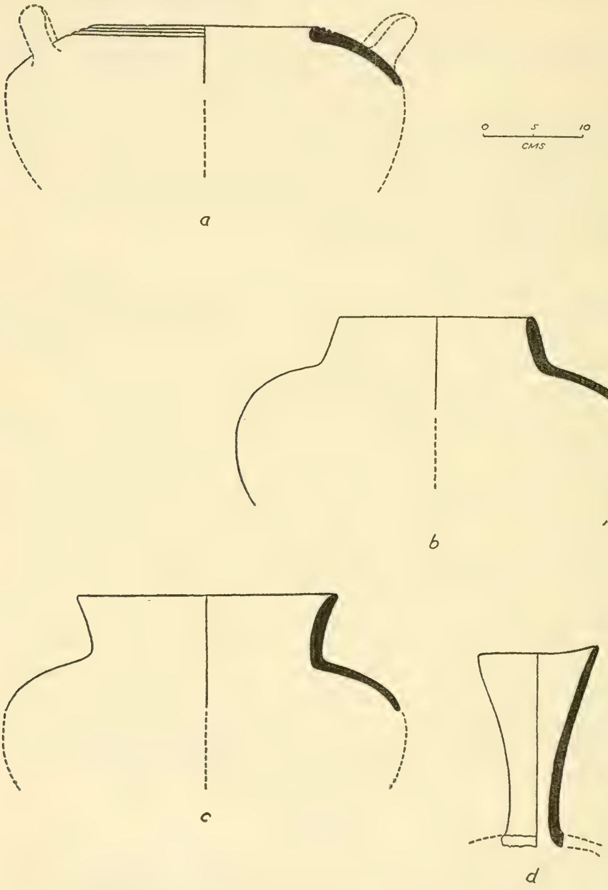

FIGURE 39.—Various common forms of jar rims and necks.

strongly constricted at the mouth, the walls curving inward strongly. The rims continue the line of the walls on the exterior; on the inside they are usually heavily thickened, often twice the thickness of the wall in cross section. The maximum thickness is usually near the lip, tapering away in the distance of 3 to 5 cm. into the apparently fairly even wall width. Occasional rims are modified by flattening or beveling off the lip to produce a horizontal edge, but most of them round off to a blunt nearly symmetrical lip. Exterior surfaces are usually smoothed; interiors are rough from a short distance below the rim, work marks being very visible.

The rim diameters (measured across the interior edge of the lip) range from 12 to 30 cm.; the average of a series of measurable rim sherds being just under 22 cm.

These rims, which are among the more abundant rim sherds of all levels especially in the Coarse Paste wares, are more commonly decorated than any other form or jar rim. Once more we find series of one to three circumferential lines incised about the exterior of the rim, as the frequent ornamentation. More complex designs are rare.

Inleaned jar necks (fig. 39, *b*).—A fairly common type of jar rim and neck is one in which a nearly straight neck is turned upward at a sharp angle from the strongly incurved side. The neck is inclined inward at an angle usually varying 10° to 25° from the vertical. Rims are ordinarily simple and direct, finished off a blunt rounded lip. Rarely, they are strongly tapered, or else slightly thickened with a flattened lip. These necks range in height from 3 to 6 cm., with a rim diameter of 14 to 28 cm. They are fairly consistently thicker than the body sherds from the same vessel: a typical series runs as follows: neck 0.95 cm., body 0.79 cm.; neck 0.97 cm., body 0.64 cm.; neck 0.98 cm., body 0.57 cm.; neck 0.78 cm., body 0.70 cm.; neck 1.05 cm., body 0.61 cm.

Decoration is not uncommon on these necks and rims. One Coarse Brown ware specimen from Str.-3 has heavily incised lines in groups of fours, one set leaning to the right, the next to the left, about the neck. This is quite elaborate as La Venta jar decoration goes. The necks are ordinarily smoothed but not polished on both exterior and interior; the interiors below the joint of neck and body are nearly always rough, retaining work marks.

Concave (*inleaned and returned*) *jar necks* (fig. 39, *c*).—These necks, like the preceding ones, turn upward at an abrupt angle with the strongly inturned side. They slope inward slightly around their base, then flare outward. The rim is usually about the same in diameter as the base of the neck, therefore. The degree of flare varies: in some cases it is a fairly even arc, while in others the flare increases rapidly toward the rim. Rims are nearly always simple and direct;

some have a slight flare that augments the flare of the upper portion of the neck. In height these necks range considerably, but the majority fall into a short group, from 2 to 3 cm. high, or into a medium group, from 5 to 7 cm. high. There are of course specimens in between, but there seems to be a definite clustering in these two height ranges. I could note no significance in vertical distributions of low and medium necks. Basal diameters of these necks are about the same as those of the inleaned necks, and therefore, obviously, the rim diameters average slightly larger. The same relationship obtains between neck and wall thickness in these as in the preceding class of necks. The surfaces show the same treatment: smoothing inside and outside the neck, with the jar interior rough below joint of neck and wall. Decoration of any sort is very rare.

Very tall slender jar (?) necks (fig. 39, *d*).—The collections contain a few jar necks and neck fragments that may belong to a special type of jar, or conceivably could come from vessels that might be classed as bottles rather than jars. These necks flare strongly toward the top, and carry their minimum diameter just above the joint with the side wall. One example has a maximum height of 19.1 cm., a diameter of 5.4 cm. just above the joint with the wall, and a rim diameter of 12.1 cm. One side of the rim extends farther upward and outward than the rest, but whether this represents an attempt to provide an open spout for pouring or is the result of careless workmanship is difficult to determine. The minimum bore of the neck is 3.4 cm. The open upper portion is smoothed on the inside as well as on the outside, but the lower restricted part is quite rough on the inside, showing work marks apparently left by the worker's fingers while shaping it. It seems to have been made separate from the body of the vessel, and then welded on.

Jar bodies (fig. 39, *a-c*).—The strongly inturned arcs formed by the body sherds attached to necks and rim suggest that the common jar bodies may have been of an oblate spherical shape, or else had a pronounced shoulder. Angular shoulders are very rare in the collections, however. It would appear that oblate spheroidal shapes were probably common; there were however other forms. One form, an example of which has been published (Drucker, 1947, pl. 1, *f*), is of a form perhaps best described as that of a flattened sphere surmounting a short truncated concave-sided cone. The published vessel is the only complete one of this shape, but there are a number of jar bases in the collections that appear to come from jars similar in form. What other shapes occurred cannot be told from the available sherds.

Handles, for the most part cylindrical loops placed sometimes horizontally and sometimes vertically, set high on the vessel near the neck or rim, are found on jar sherds, not frequently, it is true, but probably more often than on any other type of vessel. They are found on both neckless and necked forms. There are also a number of vessel lugs in the collections, but it is not certain to what sort of vessels they were attached. The large high-set lugs associated with the neckless Upper Tres Zapotes jars do not occur at La Venta. Annular bases seem to have been attached to a moderate proportion of the large jars. It would appear that they went most often with the elongated body forms, for many of them are of rather small diameter.

Jar size is impossible to judge accurately, but the arcs of sherds attached to rims and necks suggests that many of them were of moderate size; 40 cm. must have been a fairly common maximum diameter. Wall thicknesses seem rather thin considering the probable size of the vessels. The average thickness of a series of typical jar sherds is 0.6 cm.

In addition to the large jars, there are numbers of sherds that seem to come from vessels of the same form that were considerably smaller. They were not, however, small enough to be considered miniatures, but may have had some special purpose. I am not able to determine if these small jars simply represent one extreme of a series of a wide range in size, or if they were a separate group distinguished by size. One of the few complete examples is from the 1943 excavations; as well as I can measure it from the photograph, it stands 8.6 cm. high, and has a maximum body diameter of 11.4 cm.

Characteristically, jars were fairly well smoothed on the exteriors, and left rough on the inside. Interiors usually show fine striations over the entire surface suggesting work marks left by some implement like a corncob or a bundle of grass. Occasionally, but not commonly, the exteriors from a short distance below the neck (or the rim in the case of neckless forms), were left so treated. This exterior surface finish is much less common however than at Tres Zapotes where, especially in Plainware jars, it was the usual finish.

MISCELLANEOUS FORMS

Small thick-walled jars (fig. 40, *a*).—The collections contain fragments, and a few restorable pieces, of small vessels that in form approximate the jars, but are distinguishable from them by their massive walls. One may presume that they fulfilled some very special function, in which capacity was of less moment that strength or weight. A typical example has a wall thickness of 1.8 cm., a vertical height of 16.4 cm. and a maximum diameter of 14.2 cm.; the heavy construction contrasts sharply with the rather thin walls typical of the large jars. The interiors are often quite rough; the mouths seem to have been too small for the worker to get the hand through to do anything. I

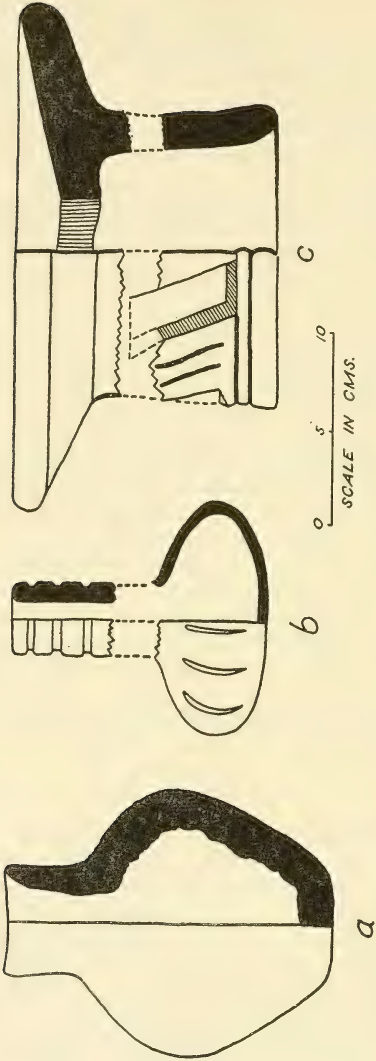
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Figure 40.—Miscellaneous vessel shapes. *a*, Small thick-walled jar. *b*, Hypothetical reconstruction of bottle. *c*. Pot-rest.

thought for a time, after Dr. George M. Foster pointed out to me the widespread use of molds in recent and modern Mexican pottery-making, that these objects might have served for molding, but I was not able to discover any unquestionable mold seams (like those to be seen in many modern pieces) on any La Venta sherds, so the function of these vessels remains a mystery. They very definitely form a separate class of vessels. The body tends to an elongated ellipse in outline, with a short stubby neck and a simple rim, often somewhat assymetrically tapered.

Bottles (fig. 40, *b*).—A few small vessel necks suggest that whether or not the so-called "jars with long slender necks" were properly bottles or jars, there was a class of vessels that we may refer to as bottles. The necks, if the few examples are typical, were more than 5 cm. long, and cylindrical in form. There are also a few body sherds of small squat vessels with reduced orifices that may have belonged to such necks. These are usually gadrooned, or vertically fluted. One example of neck had three heavy channels carved about it while the clay was still soft; in addition to the wide flutings on the body sherds supposed to go with the necks, several have heavy incised lines about the joint of body and neck.

Pot-rests (fig. 40, *c*).—From nearly all levels of the stratigraphic trenches come fragments of a type of object that I here designate pot-rest in an attempt to avoid confusion with the cylindrical "potstand" with flaring ends, widely if sporadically distributed through Mesoamerica. This pot-rest consisted of a very heavy disk of clay, either level or sloping slightly toward the center, with a central perforation, mounted on a high annular base. The base seems to have been slotted, frequently; that circumstance and the fact that some of the specimens are noticeably smoke-blackened suggests they may have been set directly over the fire at times. The dimensions of a fairly typical pot-rest are as follows: Diameter of disk, 26.2 cm., diameter of central perforation, 5.2 cm., thickness of disk, 2.1 cm., diameter of supporting cylinder, 14.7 cm., height of supporting cylinder, more than 9 (?) cm. (i. e., support broken, incomplete).

I do not know of similar objects from any other site in the area.

Thick-rimmed urns.—This desigation refers to a class of vessel known only from the rim at La Venta. It was not common, but it is probably significant that the rims are identical with a fairly common Tres Zapotes type (Drucker, 1943 a, p. 53, fig. 26). They come from quite large vessels, to judge by the arcs of the rim fragments; the vessel walls are thin, but the rim was tremendously reinforced on the inner side to give it a cross section of an inverted round-cornered triangle, with maximum thickness of as much as 5 cm. just below the flattened lip.

Pitcherlike vessels.—The occurrence of pitcherlike forms is suggested by the presence in the collections of a few sherds that seem to be parts of elongated shallow lips designed for pouring. It is profitless to speculate on what sort of bodies and orifices these were mounted.

Effigy vessels (pl. 18, *a*).—Effigy bowls were not commonly made at La Venta, to judge by our ceramic sample. One interesting piece was collected in 1942, which apparently is a fragment of a small bowl made in the form of a jaguar's head with the animal's mouth forming the orifice of the vessel. So far as I know this concept—inverting the head of the subject so that its mouth forms the vessel orifice—is rather uncommon in Mesoamerica.

The fragment is of very poorly fired Coarse Buff ware, and of course may not have been a vessel, actually; it could have been part of some architectural ornament, or something of the sort. Some other sherds found suggest, by their irregular shape or the occurrence of bits of modeling, that they may have come from effigy vessels, but they are too incomplete to permit us to be sure of this fact, and even less, what they represented, or what the over-all form of the vessels was. In 1943, a portion of the upper side of a small bowl with incurved returned sides was found which carries a boldly modeled stylized jaguar with gaping mouth (pl. 18, *b*). Two little tabs on either side of the face might be lugs, but since they are placed with their axes vertical, more likely are meant to represent the animal's ears.

Compound vessels.—Among the pieces recovered in 1943 is a vessel of compound plan, simulating four low flat-bottomed dishes with vertical sides, joined together to form a single compartmented container (fig. 41, *c*, *c′*). The 1942 collections include nothing that can be recognized as being of this or of similar form.

Handles and lugs.—While it can scarcely be said that handles and lugs are common at La Venta, there are a number of them in the collections, a very few still attached to sherds that indicate the sort of vessels on which they were used, and the rest broken from the vessels. Most of the handles are roughly made, with heavy cross sections apparently meant to approximate cylindrical forms. Both vertical and horizontal attachments were used. Strap handles are less common, but there are a few examples of thin well-made but rather fragile appearing appendages of this type (fig. 42).

Lugs tend to be thick, heavy, rounded protuberances from the sides of vessels. They seem to have been attached to jars most often. It is possible that they were not meant to aid the fingers in gripping the vessel to lift it, but were intended to keep a pack strap from slipping up over the neck or rim while the jar was being carried on the back.

Ring stands and feet.—Ring stands, to use the terminological distinction pointed out as significant by Kidder, Shook, and Jennings,

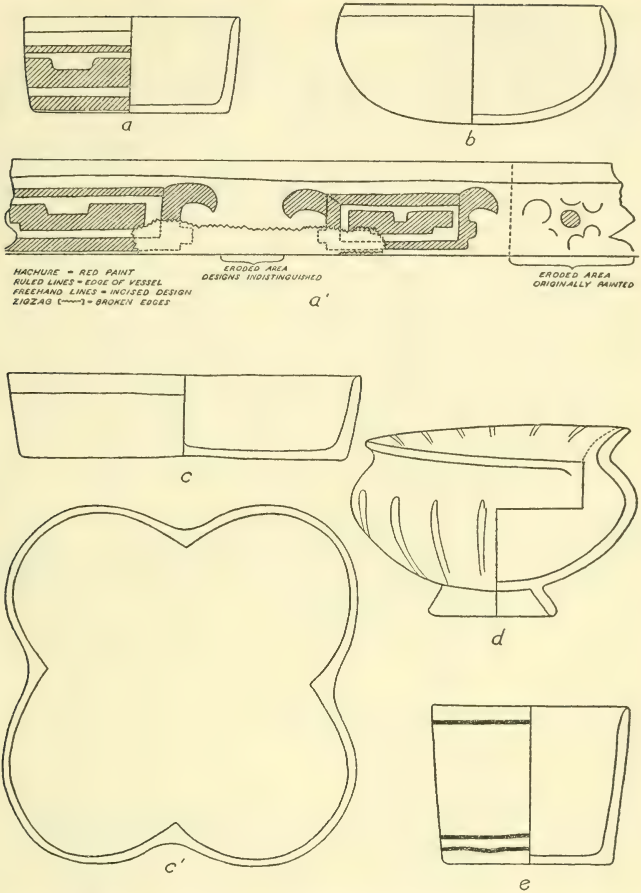
a
b
HACHURE = RED PAINT
RULED LINES = EDGE OF VESSEL
FREEHAND LINES = INCISED DESIGN
ZIGZAG (~~~) = BROKEN EDGES
ERODED AREA
DESIGNS INDISTINGUISHED
a'
ERODED AREA
ORIGINALLY PAINTED
c
d
c'
e

Figure 41.—Complete vessels from 1943 excavations, drawn from photographs (*a* approximately 5 cm. high, remainder to about same scale). *a*, Red on Coarse Brown ware with post-firing incised outline of design. *a'*, Design of *a*. *b*, Coarse Black ware. *c*, Compound dish of Coarse Buff ware. *c'*, Plan of *c*. *d*, Coarse Brown ware gadrooned bowl, with ring stand, returned, asymmetric ("shell-like") rim. *e*, Coarse Buff (?) ware bowl. (See also pl. 19.)

(1946, p. 176) are the commonest form of modified support at La Venta. They tend to be rather heavy in proportion to their low height and usual small diameter, as though used chiefly for heavy vessels. As has been remarked, to judge by the smoothed and even
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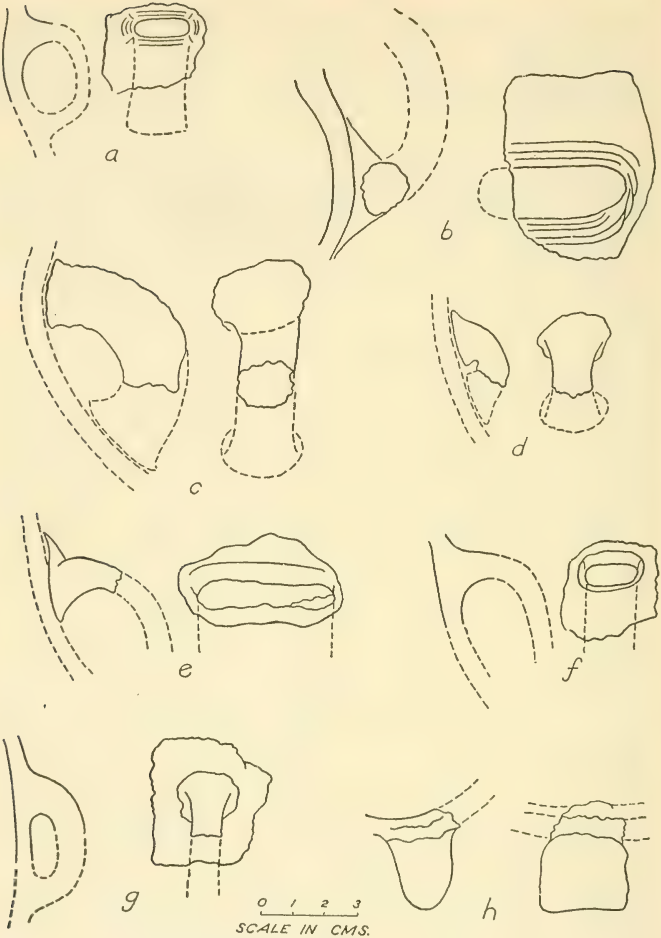

Figure 42.—Various handles and vessel foot (?). *a*, Coarse Buff ware strap handle. *b*, Coarse Brown ware, heavy strap handle. *c*, Coarse Brown ware, heavy loop handle. *d*, Coarse Brown ware, small loop handle. *e*, Coarse Black ware, heavy strap handle. *f*, Brown Lacquer ware, strap handle. *g*, Fine Paste Orange ware loop handle. *h*, Coarse Brown ware small solid vessel foot (?).

polished interior surfaces of the vessel-floor fragments attached to some of them, it seems that they may have been attached to bowls or dishes in some cases; others were apparently attached to jars.

The scarcity of feet and legs is a rather surprising feature of the La Venta ceramic pattern. The commonest type, and it is rare, is a small solid subconical knob, which, if applied in threes, as we may guess may have been the case, would have tended to prevent a vessel from tipping so easily, but would scarcely have raised the bottom up off the ground surface.

Only one example of an elongated hollow leg was found, and it was so elaborate that in view of the rarity of such pieces at the site it must be either a sport, as it were, or else an imported specimen (of course it is possible that the piece was not actually a vessel support, but an object made for some other purpose) (pl. 21, *a*, *a′*). It has the general form of a hollow vessel leg, flaring at the open top for attachment to a vessel (or some other object of clay). Boldly modeled on one side is a human face, in a tradition unrepresented in La Venta figurine collections. The piece appears to be of the Local Fine Paste Orange ware clay. As remarked, it may not be a vessel support at all, in spite of its structural resemblance to such objects.

DISTRIBUTIONS OF VESSEL FORMS BY WARES

Of the vessel forms described in the preceding section, the following were most abundant in recognizable fragments in the sherd collections from the stratigraphic trenches:

TABLE 6.—*Distributions of vessel forms by wares*[1]

Vessel form	Ware							
	Coarse Buff	Coarse Brown	Coarse White	Coarse Red	Coarse Black	Brown Lacquer	Fine Paste Buff-Orange	Fine Paste Gray-Black
Dishes:								
Flat base, flaring side:								
Simple direct rim	X	X	X	M	X	X	X	X
Thick beveled rim	M	M	M	—	I	I	I	—
Wide everted rim	I	I	I	—	—	X	I	—
Open curved sides, thick rim	I	I	—	—	I	—	—	—
Open curved to slightly incurved sides, simple rim	M	M	M	X	X	I	X	X
Bowls:								
Incurved sides with angular shoulders (?):								
Heavy everted rim	M	M		—	—	—	—	—
Returned sides with angular shoulder	I	I	I	—	I	—	M	M
Flat bases, concave sides	I	I	—	—	I	—	I	I
Incurved returned sides	M	M	M	I	I	I	I	I
Jars (rims and necks):								
Neckless, thick direct rim	M	X	I	—	I	—	—	—
Up-leaned necks	M	M	—	—	I	—	—	I
Concave (returned) necks	M	M	—	—	I	I	I	I
Miscellaneous:								
Pot-rests	I	I	—	—	I	—	—	—
Handles	I	I	—	—	I	—	I	—
Ring stands	I	I	—	—	I	—	I	I

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[1] Key: The following symbols are used in the table to indicate frequency of each form in the wares as listed: X, abundantly represented; M, moderately represented; I, infrequently represented; —, not represented. These appraisals of frequency are based on numbers of recognizable examples, in relation to the total frequency of the particular ware.

It seems quite apparent that although there are few form types of universal distribution among the wares from the La Venta stratigraphic trenches, except for certain rather simple forms, there is considerable overlap between the wares. There are no forms restricted to one ware alone. Of course this generalization of the pattern may be due to the fact that we are dealing with very fragmentary material, in which only the simplest and sturdiest vessel shapes can be recognized. Had we more complete specimens, no doubt the variety of vessel shapes and the number of elaborate unique pieces would be increased; the few whole vessels from the 1943 excavations added a considerable series of new forms to our list, including such unique forms as the compound dish, the bowl with the asymmetrical (shell-like) mouth, etc.

POTTERY-MAKING TECHNIQUES

There is little clearcut evidence in the collections as to pottery-making techniques of the Olmec. I very tentatively suggested the use of one type of thick-walled vessels as molds as a possibility, not by any means a probability. Two sherds of the entire series show seams (in one case not entirely welded over), that might perhaps be interpreted as mold joints (pl. 22, *left*, *a*, *b*). These joints may really be poorly welded coil joints also, of course. It appears worthwhile, however, to mention these dubious examples to point out need for assembling all possible evidence on use of molds in pottery making in Mesoamerica, since it is a technologic trait that may be significant in finally appraising the level of influences from and to South American cultures, as Willey has recently pointed out (Willey, 1947). The evidence for coiling is a little better, for the collections include a very roughly made vessel with unsmoothed interior in which a series of coil joints can be seen very clearly (pl. 22, *right*).

A great many sherds of jars and vessels with restricted orifices that were only roughly smoothed have a "raked" surface as though they had been gone over with a bundle of grass or a corncob, or some similar object, in the smoothing process (pl. 22, *left*, *c*, *d*). A few jars show the same treatment on the exterior (this is a more common trait of Tres Zapotes jars). One may judge that the smoothing and the polishing objects as well must have been of perishable materials, for the few pebbles and bits of pumice with worn surfaces found are too scarce to have been the usual potter's tools.

VERTICAL DISTRIBUTIONS OF CERAMIC TYPES

The distributions of the La Venta wares, by stratigraphic levels, in the two stratitrenches are as follows:

TABLE 7.—*The distributions in Stratitrench 1*

Ware	Level 1[1]		Level 2		Level 3		Level 4		Level 5	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Coarse Buff	51	22	66	20	668	20	848	16	417	17
Coarse Brown	77	33	97	29	1,017	31	1,678	31	943	37
Coarse Black	13	6	12	4	122	4	198	4	136	5
Coarse White	1	(2)	2	(2)	17	(2)	78	1	45	2
Coarse Red	--------	--------	1	(2)	23	(2)	56	1	35	1
Brown Lacquer	2	(2)	3	(2)	78	2	204	4	71	3
Fine Paste wares	89	38	148	45	1,356	41	2,330	43	871	35
Painted[3] wares	--------	--------	--------	--------	2	(2)	12	(2)	1	(3)
Totals	233	--------	329	--------	3,282	--------	5,404	--------	2,519	--------

Total sherds: 11,767

[1] All levels 30.48 cm. thick. Level 1=0–30.48 cm.; Level 2=30.48–60.96, cm. etc.
[2] Indicates presence in amounts under 1 percent.
[3] All sherds with painted decoration included.

The Stratitrench 1 picture has some peculiar features at first glance. One of the most striking is the sharp reduction in number of sherds from the two uppermost levels, as compared with inferior cuts. Ceramic materials were definitely sparser in Levels 1 and 2 than in the rest. The actual diminution in quantity was, however, augmented by destruction of sherds in the uppermost soil zones by roots, root acids, and humic acids, on the one hand, and on the other by the fact that the sherds counted above represent about a third of the fragments recovered; the remainder were too badly preserved to be classified. I expected to find the percentage counts of these two upper cuts badly out of line with those of the deeper levels. As a check on the extent of their deviation, the probable error of sampling was computed according to the formula suggested by Shepard.[12]

The following table gives for the principal wares the values for 3ς (three times probable error), which when added to and subtracted from the observed proportion, gives a range within which there is a very high probability that the true value falls.

TABLE 8.—*Stratitrench 1: 3ς values of principal wares*

Ware	Level				
	1	2	3	4	5
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Coarse Buff ware	8.1	6.6	2.1	1.5	2.4
Coarse Brown ware	9.3	7.5	2.4	1.8	3.0
Fine Paste wares	9.6	8.4	2.7	2 1	2.7

[12] Shepard, 1936. $\varsigma=(pq/n)^{1/2}$, in which ς is "probable error," p is "proportion of successes," q "proportion of failures," and n "number of observations."

It is apparent that the two uppermost levels have a greater probable error, which we may interpret here as including the effect of destructive soil action, as well as error of sampling introduced by methodology of collecting, which was as far as possible kept uniform for all levels. The three lower levels, on the other hand, probably represent a nearly true picture of ware distributions. Therefore it seems justifiable to allow for greater error in the two upper levels, discounting marked deviations from trends indicated by the materials from Levels 3, 4, and 5.

On that basis, it can be seen that there is an evident regularity in the percentage distributions, with suggestions of slight shifts in popularity, but no sharp breaks. Coarse Buff ware shows a slight tendency to increase in proportion from bottom to top of the trench (17 to 20 percent), Coarse Brown ware diminishes slightly (37 to 31 percent), and the Fine Paste wares show a moderate increase. The minor wares run along fairly evenly: both Coarse White and Coarse Black tend to dwindle away in the upper layers (disregarding the higher proportion of Coarse Black in Level 1). We may suspect the virtual disappearance of Brown Lacquer ware is not a real change, but due to poor preservation conditions in the surface levels. It is the ware that one would expect most likely to be eroded into an unrecognizable mass of nondescript sherds, because of the softness of its paste and the tendency of the slip to flake off.

It is difficult to interpret the fairly consistent trends toward increasing or decreasing percentages. I would stress that I believe these to be real, if slight, changes in preference by the pottery makers.

TABLE 9.—*The distributions in Stratitrench 3*

Ware	Level 1[1]		Level 2		Level 3		Level 4		Level 5	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Coarse Buff	395	33	921	35	924	27	1,275	26	376	22
Coarse Brown	488	41	1,110	43	1,687	49	2,936	59	1,188	69
Coarse Black	60	5	80	3	100	3	190	4	28	2
Coarse White			34	1	69	2	64	1	89	5
Coarse Red	1	(2)	4	(2)	7	(2)	7	(2)		
Brown Lacquer	5	(2)	31	1	80	2	19	(2)	8	(2)
Fine Paste wares	248	16	442	17	580	17	478	10	41	2
Painted[3] wares			4	(2)	5	(2)	1	(2)		
Totals	1,197		2,626		3,452		4,970		1,730	

[1] All levels 30.48 cm. in thickness. Level 1=0–30.48 cm., Level 2=30.48–60.96 cm., etc.
[2] Indicates presence in amounts less than 1 percent.
[3] All sherds with painted decoration included.

The general picture of the distribution in this trench is like that of the preceding, one of continuity and regularity of the ceramic pattern. The decrease in volume of the uppermost level is due to poorer preservation of the surface materials; however, there was a much smaller proportion of unclassifiable material from this cut than in the preceding trenches. Level 5, at the base of the deposit, simply yielded slightly less sherd material in terms of volume.[13]

We may also note the regularity of trends in the ware percentages from the various layers. Coarse Buff and the Fine Paste wares show strong trends toward increase, from the lower to the upper levels, while Coarse Brown as steadily diminishes in relative volume. The minor wares seem to fluctuate a bit, perhaps because in their lower frequencies a larger or smaller amount of unmatchable pieces of two or three broken pots makes more apparent deviation. But even these fluctuations do not greatly disturb the general picture of continuity of the ceramic pattern during the period represented by the deposit that our trench intersected.

When the two sets of distribution data are compared, however, a much more complex picture appears. First of all, it should be noted that, despite changes in trends and relative frequencies, the evidence for continuity persists. That is to say, the changes evidenced are not such as would indicate a cultural break equivalent to a change from one to another cultural horizon. The same wares occur in both trenches, and moreover, the same wares appear as major components of the ceramic pattern (i. e., the wares of higher frequency), and the same ones—Coarse White, Coarse Black, Coarse Red, Brown Lacquer, and the rare bits of painted pottery included under the head of "Painted wares" are of low frequency in both stratigraphic sections. Likewise, as will be shown, there are no radical changes in vessel forms. The same vessel shapes appear in both trenches as the common ones (at least insofar as can be determined from the fragmentary material), and there is no indication of introductions of new forms, at least involving modifications like handles, supports, etc., that altered the ceramic complex to any great extent. The very infrequent handles and lugs come from both trenches; the heavy ring stands (or "annular supports") likewise come from most levels of both; true feet or legs (such as are associated with the tripod and tetrapod vessel support patterns of Mesoamerica) are virtually absent from both excavations. The peculiar "pot-rests" are to be noted in all levels of the two trenches. The same applies to types of decoration: rocker stamping (infrequent, but in all levels), punctate design, and the only really abundant form of decoration—that consisting of incised lines circling the vessel mouth—have the same distribution. If we take the use of painted decoration as a design trait (deleting it from the list of separate wares) we get the same result: a very few examples show up in most levels of both stratigraphic sections. It seems clear then that we are dealing with ceramics all belonging to a single pattern, and so far as one can see, to the same general horizon within that tradition.

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[13] The maximum value of 3_s from this trench is 4.2 percent (Coarse Brown ware, Level 1). The 3_s values run low, being quite similar to those of Levels 3, 4, and 5 of Stratitrench 1.

The differences in relative proportions of the several wares are nonetheless very apparent. In searching for an explanation to account for them, one of the first questions that obtrudes itself is that of time: can the two deposits be regarded as contemporaneous, or does one represent an earlier, one a later phase of the La Venta occupation?[14] First of all, there is nothing in the nature of the deposits themselves that suggests temporal differences. The poorer preservation of the material from the upper levels of Stratitrench 1 probably can be accounted for as the result of differences of the local soil climates—differences in drainage, forest cover, and the like. The only evidence pro or con contemporaneity of the two deposits must be derived from the cultural material contained in them.

If we suppose, as a working hypothesis, that two small communities existed during the same time period at the two localities, a short distance apart—not an hour's leisurely stroll from one to the other—and occupied by Indian families who shared the same cultural traditions, in particular, the same ceramic tradition, it is very difficult to suggest a reason why their inhabitants should have made different amounts of the same wares. If the differences were due to use of special materials, coupled with some such concept as that of individual or village ownership of claypits, the expectable result would be a general similarity of local ceramics, with certain ware or wares (those made of the uncommon type of clay) present at one locality and absent, or found in relatively minute amounts only, at the other. Likewise, if some class or caste system prevailed in which the occupants of one locality were priests and chiefs, and those of the other their troops or labor battalions to whom the use of certain finer vessels, among other things, was prohibited, we should expect to find no fragments of the tabued articles at the one locality. The fact, however, that such differences do not occur, and that not only do the same wares (and vessel forms, and figurines as well) occur in both deposits, but that the major wares show the same general trends, makes it seem probable that the localities were not contemporarily occupied, but that one succeeded the other. In both sections, Coarse Buff ware and the Fine Paste wares show a marked increase in relative frequency from lower to upper levels, at the expense of Coarse Brown ware which decreases notably from bottom to top in both trenches. The regularity of these trends is one of the strongest arguments for successive rather than contemporaneous occupation.

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[14] The very clear relationship in the total ceramic patterns has been outlined in the preceding paragraphs in stating the case for assigning material from both deposits to a single cultural horizon; I do not mean to deny such unity of pattern and presumed unity of culture horizon by pointing out the possibility of sequence of "phases." If such temporal divisions can be shown to exist, they would be very minor components of what was essentially a single cultural stratum.

The most reasonable explanation thus appears to be that we are dealing with remains from two successively occupied localities belonging to the same cultural horizon. Such minor changes in style and preference as are indicated by the percentage trends in the levels of the two stratitrenches would have in time come to the gross differences represented by the two lots of material.

If we assume that the two deposits were successively occupied, the next step is to see what indication there is as to which was the earlier and which the later. On the basis of the sherds alone, this would be very problematical, were it not for the evidence of the nature of the trends of ceramic changes at the related site of Tres Zapotes. There, especially in the Middle Period, it will be recalled, the general over-all pattern of the ceramics was very similar to that at La Venta. Numerous points of striking similarity have been mentioned in the descriptions of La Venta ceramic types. One of the pronounced trends of ware frequencies during the Middle Period at Tres Zapotes (and, it should be noted, one that continued into the Upper Period as well, indicating that it was a consistent developmental process of the ceramic pattern), was the increase in vogue of the Fine Paste wares at the expense of the manufacture of vessels of coarser pastes. Since the Fine Paste wares at the two sites are undoubtedly related components of the local pottery complexes, it follows that a similar trend is to be expected at La Venta. The sherds from both trenches show strong and consistent increases in proportion of Fine Paste wares from the earliest to the uppermost levels of each. It therefore seems logical to suggest a sequential development from Stratitrench 3, in which the Fine Paste wares increase from a low to a moderate abundance to the time of occupation of the deposit cut by Stratitrench 1, where these wares were abundent in the lowest levels and attained an even higher frequency in the upper ones. Concomitant with the continuity from one trench to the other is that of Coarse Brown ware. It decreases, sharply at first, then more moderately, from lower to upper levels of Stratitrench 3, and continues to diminish at a moderate rate during the aggrading of the deposit cut by Stratitrench 1. The general tendency toward relative increase of the Coarse Buff ware would appear to continue from one trench to the other with such a sequence, although the absolute difference of the percentages is rather great (33 percent in the Level 1 of Stratitrench 3, 17 percent in the Level 5 of Stratitrench 1). It seems possible that an unconformity exists between our two sections as they now stand. It need not have been of particularly great duration, of course.

In conclusion, examination of the ware frequencies from the two stratigraphic trenches suggests that the two deposits contain the ceramic products of a single cultural horizon, since the same wares, vessel shapes, and decorative techniques persisted through the total period represented by the two deposits. It also seems probable that of the two, Stratitrench 3 sections a site occupied early in the period, while the locale cut by Stratitrench 1 was lived on by the bearers of the same tradition a bit later in the era. The broad similarity of the materials from the two trenches is the more striking, indicating a fundamental continuity of tradition within a single culture horizon.

POTTERY FIGURINES

TAXONOMY

La Venta pottery figurines belong to the same tradition of handmade clay figures as those of the premold eras of Tres Zapotes, and presumably of most of the intervening region. This tradition appears to be linked, on the basis of technology and style, with those of early Mayan horizons on the one hand—early Uaxactun and Miraflores, specifically, and in the other direction to a figurine pattern of the Huasteca. However Olmec figurines in all their varieties have enough distinctive features so that they can be recognized readily as a group apart, within this wider pattern. From the Tres Zapotes ceramic sequence we have certain trends in their local development and variation. In the Lower period these figurines were quite rigidly standardized and limited to but few variations (indicating that they already had passed through a developmental phase), and in Middle Tres Zapotes appears much more variation, with new varieties, and hybridizations of the several types, as though the makers were deliberately toying with the existing forms. Yet even here there are cleancut types, and hybrids whose parent forms are easily recognized. (In Upper Tres Zapotes these objects were superseded, of course, by the apparently imported complex of mold-made figurines which not only differed in technique but in subject matter as well.) The figurines from La Venta fit very neatly into the Middle Tres Zapotes group. Not only is one numerically important at La Venta the same as one characteristic of Middle Tres Zapotes, and a less common type similarly occurs at both sites, but the general trend of all La Venta figurines shows the same kind of deviation from and modification of ancestral forms that characterize Middle Tres Zapotes.

Before describing the La Venta figurine types in detail, it will be necessary to present a revision of the original classification of handmade figurines from the region. Such an overhauling is essential not because of lack of validity of the types defined, but rather because of certain sins against systematic taxonomy that I committed that make it awkward to add new types as they are discovered, and difficult to show relationships and derivations. In describing the Tres Zapotes materials, the hand-made figurines were put into two major groups, designated by Roman numerals I and II, each of which was further divided into subgroups, or "types" indicated by letters A, B, and C under Group I, and, illogically, D, E, and F under Group II. "Types" I-A and I-C are closely allied both typologically and stratigraphically; the difference between them is of a different order from that between either of them and "Type" I-B. The members of the second group differ considerably in point of distinctiveness; one type, II-F, being more closely related to the I group than to either II-D or II-E. This framework obviously does not allow for much expansion. When, at Cerro de las Mesas, a few typologically related forms appeared—although the bulk of the figurines were non-Olmec, like most of the ceramics—they were lumped together under a single head (I), to set them off from the rest of the Mixtequilla material, and new types were given additional letter designators. Thus, Cerro de las Mesas Figurine Style I telescopes Tres Zapotes Groups I and II, and adds a few letters. This modified classification is more elastic as regards addition of new types, although it is conceivable that we might in time run out of letters, but it cannot be made to show relationship of types easily. If consecutively lettered types should be stylistically and/or genetically akin, it would be pure coincidence, and likely we would end up deriving a (hypothetical) "Type K" directly from Type B, or Q, a sort of step that could easily confuse the person working with the material and almost certainly would befuddle the weary reader. On this account I have attempted to work out a more logical and at the same time a more flexible system of categories for Tres Zapotes-La Venta hand-made figurines and their nearest relatives. It must be noted that this classification covers only hand-made (not mold-made) figurines, and furthermore, covers only the southern Veracruz-western Tabasco region. I believe, however, that with but little revision it could be extended to cover hand-made figurines from adjacent regions also, although at present it includes only types found at Olmec sites.

First of all, there are three (rather than two) basic groups, which we may designate "Styles" within the body of material: Style I, in which the features are indicated by (multiple) punctate impressions and applique; Style II, in which narrow slits rather than punctations are used, again supplemented with applique elements, although somewhat less elaborately; and Style III, in which features are shown entirely or principally by means of modeled relief, or sculpturing.

Both Style I and Style II types are typically made of coarse heavily tempered, poorly fired, reddish-brown to buff clays, are soft and friable, and consequently erode badly. Style III figurines often, though not invariably, are made of finer, more compact pastes, often resembling the material of the Fine Paste wares. In addition to these basic Styles, combined designators, such as I/II, I/III, etc., can be used to indicate hybridizations, depending on which Styles are involved in the cross.

Within Style I, characterized by use of punctations and applique elements to indicate features, are a series of classes. At present three such classes can be distinguished as consistent strains, but more can be added as new forms appear from sites still unexplored. The first Class, I-A, is the "Classic" form of figurine of the region, so-called because of its very rigid stylization, and also out of deference to the fact that it is represented to the exclusion of all but one other Class in the ash-sealed Early Tres Zapotes section, and must be quite early (Drucker, 1943 a, pl. 35). The distinctive features are: large rather rectangular face, usually giving the effect of heavy jowls and marked prognathism, although occasional pieces have slightly pointed chins; eyes represented by semicircular stamped arcs with central punctation, nostrils and corners of mouth marked by circular punctations, ears may or may not be indicated, but ear spools invariably are shown. The bodies associated with these heads are often rather graceful, with constricted waists (not always slender, however), and wide hips. Some very obviously indicate pregnancy. Arms and legs are impressionistically sketched. Legs of standing figures often taper rapidly from a plump rounded thigh, producing a silhouette reminiscent of that of a drumstick à la Maryland. Feet and hands are sketchily done, with incisions to mark off fingers and toes. These figurines all represent females. Breasts and sexual parts are suppressed. The navel is almost invariably indicated by a large round punctation. Clothing is usually sketchily shown by bits of applique.

The types within this Classic group consist, so far, of the following: I-A-I, as in the preceding, distinguished by a more or less elaborate turban, (this type was designated I-A in the description of Tres Zapotes materials) (pl. 23).

I-A-2, as before, but with striated pats of clay indicating hair rather than a turban, (corresponding to the type called I-C in the Tres Zapotes account).

I-A-3, modified variants of the above types (chiefly I-A-1) that preserve most of the distinctive I-A features. In other words, these are transitional forms from which the I–B forms came directly. In some cases the sole difference is lack of punctations at the mouth; in others, all the heavy punctations are present but facial proportions are altered. (Pl. 26.) This type is abundant in Middle Tres Zapotes.

A second Class within Style I is distinguished by modifications in the direction of realism. The same techniques—punctation and use of applique elements—serve to indicate the features, but the heavy square facial proportions are softened and altered, and there is a defter touch in the use of the punctate elements: eyes and nostrils are more shallowly punched and in better proportion to the face, instead of being great staring holes as in the I-A forms. The punctations at the corners of the mouth are often suppressed. Bodies are much the same as those of the I-A types in treatment, but tend to be slimmer and more graceful in their proportions. Ornaments and clothing vary from scant in female figurines to quite elaborate in those representing males, and are invariably represented by applique. For the most part these Realistically Modified (I-B) figurines seem to derive from I-A types, through relaxing of the rigid stands of the I-A pattern. There may be other lines of influence represented, also, for the proportions of one type of head in this group (I-B-3) are reminiscent of those of early figurines from the Petén. In terms of chronology, these I-B types are all somewhat later in the Olmec region so far as present evidence goes, than the I-A types. The I-B types that occur at Tres Zapotes are consistently from the Middle Period.

I-B-1, male figures, often or usually (?) bearded, with elaborate headdress or turban, necklaces, capes, decorated belts and kilts (all indicated by applique strips of clay); features as above, facial proportions somewhat slimmer and finer than I-A types; quite often a socket remains in the middle of the back indicating the attachment of a whistle (see pl. 31; and Drucker, 1943 a, pls. 27, *l*, 44, *o*).

I-B-2, aged figures, with pronounced wrinkles and sunken cheeks; otherwise features as described for class in general, (the forerunners of this type may occur in Lower Tres Zapotes, but the maximum elaboration is found in the Middle Period) (pl. 28, *f*).

I-B-3, a type characterized by a wide face with rounded-to-pointed chin; bareheaded examples are slightly more common than turbanned ones. By separating the two varieties into subtypes on the basis of presence or absence of turbans (I-B-3a, turbanned, I-B-3b, bareheaded), their relationship to the I-A types is more clearly seen. The technique by which hair is represented, either a thin layer or several applique pats of clay with heavily incised lines, is identical in the I-A-2 and the I-B-3b forms; and in addition, many of the latter show a prominent forelock like those of the Classic group. The specimens with turbans have these articles indicated in the same fashion: Two or more strips of clay stuck on to suggest a diagonal wrap-around effect, pulled well down in back. The chief difference is that the I-B-3a pieces consistently have low close-fitting turbans, which accentuate the broad facial proportions. (This I-B-3 type corresponds in the main with that designated I-F in the description of Tres Zapotes materials, except that I erroneously included certain hybrid forms with slit rather than punctate features—the present Style II—with the Style I pieces) (pls. 26, 27).

I-B-4, a form characterized by a strongly convex profile; the facial proportions in front view are similar to those of I-A types, but because of the convexity of the profile, the chin usually recedes and is less massive than that of Classic types. The nose is prominent. High turbans, similar in proportions to those of type I-A-1, are usual, although more elaborate headgear occurs on some specimens. Eyes and other features are treated as described for Class I-B in general. This is the first of the present list of types which is rare in the Tres Zapotes collections, and has not been found there in a stratigraphic section. (Pl. 28.)

Class I-C figurines are those of grotesque types. Although at first glance they appear to be mismade aberrants, they run so consistently to certain clean-cut types that it is evident they were deliberately fashioned according to definite patterns. Features are indicated by Style I methods—with heavy punctations and applique elements. Bodies, like the heads, are misshapen: some are stubby rectangles, with wide rectangular crotch, while others are rounded, but with very exaggerated wide hips, protruding bellies, and arms and legs suppressed to small stubby tips. These bodies are usually abundantly ornamented with bits of applique to suggest necklaces, belts, etc.

I-C-1 is the most common type of this Grotesque class at Tres Zapotes, and is reflected in modified form at La Venta. The heads are strongly tapered toward the chin in outline, have an enormous nose, and the heavily marked eyes are set low on the face. Headdresses consist of elaborate tall turbans, with profuse applique elements. Sometimes chin straps are indicated by strips of clay which run over the chin. Bodies are as described for the class in general. This type was distinguished as "I-B" in my discussion of the Tres Zapotes material. It makes its appearance in Middle Tres Zapotes, and was fairly abundant all through that period. (Pls. 41 *left*, *a*; 30, *a*. *See also* Drucker, 1943 a, pls. 26, *b*; 28, *o*; 29, *d*.)

Additional types of the Grotesque class would include the Cerro de las Mesas types "I-G" and "I-H". For the present I only mention their occurrence to illustrate the way this classification can be extended, for the types from Cerro de las Mesas are not represented at La Venta, nor have they direct bearing on the La Venta material.

Style II figurines are, so far, represented by a single class and type, II-A-1, which was the basis of the type referred to as "II-D" at Tres

Zapotes. The heads are proportionately long and narrow, and quite thin. The nose is a large triangular piece of clay with "cut" surfaces. The mouth is not typically formed from an attached pellet, but marked by a horizontal slit; eyes are horizontal or slightly slanted slits. Ears are cursorily indicated by nocks or slits, and ear ornaments are not shown. This type occurs in both pure and hybridized forms at Tres Zapotes and also at non-Olmec Cerro de las Mesas; it has not been observed at La Venta, but there is abundant evidence of its influence on forms from this last-named site, especially on I-B-3 and I-B-4 types. At Tres Zapotes, this type and its derivatives appear suddenly on the Middle Period horizon. Weiant (1943, pp. 92–93) has compared it to certain Morelos figurines, and implies a belief in a derivation from the Highland. To me, there is a closer similarity in treatment and style to a Huastecan type that Ekholm (1944, p. 436) has designated the "Cut–Featured type," referable to Period II. If the type turns up in central Veracruz, when intensive work is done there, it would go a long way toward defining the connections between Olmec and Huastecan cultures. (Pl. 25, *a-c*.)

Hybrid forms derived from a blending of the basic styles can be designated by combining the keys for the types involved giving precedence to the one which appears to dominate. For example, a figurine head which appears to be essentially a II-A-1 form, modified by the addition of central punctations to indicate the eyes, would be classed as II-A-1/I; a I-B-3a figurine with slit rather than punctate eyes would be I-B-3a/II. Many hybrid forms have eyes made by superimposing two horizontal slits—a rather obvious transition between the Style I curved stamped line with round punctation, and the flat horizontal lines of Style II. At present it does not seem necessary to define more precise categories for each of the numerous possible or observed combinations resulting from hybridization.

Style III, the modeled hand-made figurines, can at present be sorted into two principal classes. The first and also the more sharply defined of these comprises the so-called "baby-face" types. The second class is a provisional one, which may or may not need to be divided and more precisely defined as more specimens become available. The chief characteristic of all Style III figurines is of course the modeling technique by which features are represented in relief without resort to such artificialities as punctations or incisions. In the construction of the figurines one occasionally sees evidence of the applique technique, but pieces of clay added in this way are firmly welded down, and evened off so that they do not produce the patchy appearance common to specimens of Styles I and II. The more skillful treatment is enhanced by the use of finer, better clay for most of these pieces.

Class III-A types, that is, those often referred to as "baby-face" forms, are too well known to require much detailed description. As their name indicates, they appear to represent infants, and are ordinarily quite consistently infantile in facial and bodily proportions. The facial outline tends to be of a long rectangular form reminiscent of that typical of I-A types. Facial planes and features are delicately modeled in accurate relief. Arms and legs are usually short and chubby, sometimes exaggeratedly so, but usually have well-modeled hands and feet, with proper numbers of fingers and toes. The antiquity of this class is demonstrated by the occurrence in the Lower Tres Zapotes material of a fragment of a small Coarse Black ware bowl with a face unmistakably in this tradition modeled on the side in low relief. III-A figurines continued to be made throughout the Middle Tres Zapotes period, where they attained considerable heights in realism and artistry. Hybrid forms (principally crosses with Style I) occur during the Middle Period.

Subdivision of III-A specimens into types is something of a problem, for the most obvious sorting, based on available pieces, is on a basis that differs from those used in typing other classes. I propose, at the risk of inconsistency, the following types:

III-A-1. Small solid figurines of the "baby-face" class. (Pl. 30, *c*.)
III-A-2. Large hollow figurines of this class. (Pl. 41, *right*, *e*.)
III-A-3. Effigy vessels characterized by the distinctive features of this class.

The class III-B, as remarked, is a catch-all, and as such, provisional. It is possible that there will always be a small proportion of specimens made in the Style III technique, but of which no two are alike—they may be actual portraits, or the results of some virtuoso's experimentation. (Pl. 43.)

Hybrid pieces, distinguished as a rule by use of punctations at eyes, nostrils, and mouth (any or all of these points) can be designated III-A-1/I, etc., depending to which type the basic features of the figurine belong.

Animal figurines.—Figurines representing animals are much harder to classify, and for the present no detailed system will be set up for them. The chief trouble appears to be that the subject matter is so varied that without a very large series one cannot differentiate between differences deriving from the artists' efforts to emphasize the distinctive features of a particular species, and differences resulting from conventionalization. In general, most or all of the La Venta animal figurines show a relationship to the artistic tradition producing the Style I human figurines, for basic forms are supplemented by use of punctations and applique, and the same coarse poorly fired paste as used for Style I human figurines is the material of which the pieces were made. Perhaps eventually it will be possible to work out a more exact classification for the animal figurines.

The creatures represented in the collections, so far as they can be recognized, are: jaguars—one with human body and dress—(pl. 41, *right*, *a*), one a strongly modeled fragment of a small vessel—perhaps to be regarded as showing Style III influence—(pl. 42, *left*, *c*); crested birds (currasow?) (pl. 37, *q*); and coatimundi (pl. 37, *m*). Several of these pieces were originally whistles.

LA VENTA FIGURINE COLLECTIONS

Among the 117 reasonably complete figurine heads from La Venta including specimens from the test and stratigraphic trenches, there are to be found most of the types mentioned in the classificatory list, and in addition a number of varieties of hybrids not specifically described, although their ancestry is obvious enough on examination of the particular features. However, despite this variation, certain types predominate, in pure or mixed strains. For example, 52 of the 117 specimens belong to one or the other of the I-B-3 forms, or mixed types such as I-B-3/II; 30 are I-B-4 or hybridized varieties thereof (I-B-4/II, I-B4/III, I-B-4/1, etc.); 17 are of I-A-3 type, slightly modified examples of the Classic types represented by the Lower Tres Zapotes material; and 9 are III-A (baby-face) types. The remaining pieces are for the most part aberrant specimens that fit nowhere into the classification, although there are some, like one modified I-C-1 piece (pl. 33, *left*, *a*), that fit the general pattern. The unclassifiable or aberrant pieces include the following: a small skull with punctate features (indicating relationship to Style I) (pl. 42, *left*, *b*); another skull, seemingly that of a monkey to judge by the extreme prognathism, very strongly modeled (pl. 43, *b*); the head, that must be a portrait of a small boy, modeled but with punctate accents, that is, a III-B/I form (pl. 43, *a*); the boldly modeled face on the object presumed to be a vessel support (pl. 21, *a*), and the strange, unfortunately badly damaged fragment that suggests to me, in a vague indefinable way, the stone "masks" of Teotihuacán, perhaps because of its inverted triangular outline (pl. 42, *f*). Even the aberrant pieces conform to the pattern of the more common types in a general sense, however, and aid in placing the La Venta figurine complex in relation to established sequences. Both typical and unusual figurines show considerable variation from the Classic hand-made types from which they appear to have derived; and on the other hand not one single example of a mold-made figurine was found. The nearest established ceramic column, that of Tres Zapotes, includes one phase in which a similar pattern occurs, the Middle Period. Closer examination bears out the impression of correspondence of general features. That is to say, the most abundant La Venta types, I-B-3 and its derivatives, occurs also in Middle Tres Zapotes, as do the modified "Classic" types (I-A-3). A very typical Middle Tres Zapotes type, the I-C-1 Grotesque, is represented by a few modified La Venta specimens. Although the apparently alien II-A-1 type, which was introduced and became abundant in Middle Tres Zapotes, is not represented in the La Venta collections, its influence on local figurine styles is very plain in the strong trend toward use of slits rather than round punctations to represent features that characterize a number of hybrid types. Finally, the I-B-4 figurines, which seem to be a La Venta specialization, fit consistently into the Middle Tres Zapotes trend, in which hand-made figurines continued to be manufactured by early (Lower Period) techniques, but with continuously greater freedom from the rigid standards prevailing in the Lower Period.[15]

All in all, the placing of the La Venta figurine complex is clear and convincing: the proliferation of the standardized early types of hand-made figurines, the absence of mold-made specimens, and the cross ties established by specific figurine types found at La Venta and in Middle Tres Zapotes, establishes the La Venta complex as intimately allied stylistically, and therefore probably undoubtedly contemporary, with Middle Tree Zapotes.

The vertical distributions of the figurine types from the stratigraphic trenches are given below. They show a consistent overlapping in the two excavations, pointing to a basic uniformity of pattern. In this regard they corroborate the picture given by ware distributions: The La Venta deposits give every indication of representing a single phase or horizon within which some development and modification of basic patterns occurred, but with no major changes—innovations, disappearance of common features, or anything of the sort that could be interpreted as reflecting new cultural contacts or local inventions altering the basic patterns enough to warrant setting of a new horizon. As a matter of fact, probably because of the relatively small number of the figurine heads, the distributions do not even show the cumulative effect of local development such as is indicated by the regular trends of the ware percentages. In short, it would be impossible to define one trench as representing a cross section of an earlier, and one of a later part of the La Venta-Middle Tres Zapotes period occupation on the basis of figurine distributions in the stratitrenches.

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[15] As has been mentioned, a few I-B-4 figurines occur in the Tres Zapotes collections (one has been figured by Weiant, 1943, pl. 26, fig. 5), but unfortunately none was found stratigraphically.

TABLE 10.—*Figurine distributions, Stratitrench 1* (*See plates 34–39*)

Figurine type [1]	Level 1	Level 2	Level 3	Level 4	Level 5
Heads:					
I-A-3			2	1(?)	
I-B-3a					2
I-B-3b	1			3	2
I-B-4		1	1	[2] 2	1
I-B-1/II					1
I-B-3a/II			3	1	2
I-B-3b/II			1		1
I-B-4/II				4	
III-A-1	1			1	
III-A-2					2
Bodies:					
I-B-1			1		2
I-A or I-B	10	10	18	28	14
III-A [3]			3	2	1
Misc. fragments of hand-made figurines	6	12	27	44	36
Bird-animal figurines	1	1	2	5	3

[1] List of types includes only those represented from the tench; other types are absent.
[2] Plus one doubtful fragmentary specimen, probably of this type, or I-B-4/II.
[3] Includes arm and leg framents definitely identifiable as pertaining to this class also.

TABLE 11.—*Figurine distributions, Stratitrench 3* (*See plates 40–41*)

Figurine type [1]	Level 1	Level 2	Level 3	Level 4	Level 5
Heads:					
I-A-3	[2] 4	2	[3] 3	1	
I-B-2		1			
I-B-3a	1		2		
I-B-3b	1	2	4		
I-B-4	1	2			
I-A/II				1	
I-B-3a/II	1		1		
I-B-3b/II		1	1		
I-B-4/II	2	2			
I-C-1/II			[4] 1		
III-A-1	1				
III-A-2				1	
I-B-4/III			1		
Bodies:					
I-B-1				1	
I-A or I-B	3	9	6	[5] 3	
III-A [6]		1			1(?)
Misc. fragments of hand-made figurines	17	23	21	22	5
Bird-animal figurines		5	1	1	

[1] List of types includes only those represented from the trench; other types are absent.
[2] Includes 2 doubtful (badly eroded) specimens.
[3] Includes one aberrant form.
[4] Modified version of Tres Zapotes I-C-1.
[5] Includes one specimen of serpentine.
[6] Includes arm and leg fragments definitely identifiable as to type also.

MISCELLANEOUS OBJECTS OF POTTERY

Among the miscellaneous pottery objects in the collections are a number of types modeled for some special purpose, and also certain types consisting of reworked sherds. The modeled objects consist of the following: cylindrical stamps, weights, ear spools, flares, and problematical objects. The category of reworked sherds includes: large and small sherds, disks, weights, and "saws."

Cylindrical stamps.—One complete cylindrical stamp was found in a test pit, and a fragment of one came from the 24–36-inch level of Stratitrench 3 (pl. 42, *left*, *a;* the "unrolled" designs appear in fig. 43). The patterns are characterized by the heavy carving and simple not to say crude designs. It is possible that the objects were beads rather than "stamps." Much more elaborate specimens were found at Tres Zapotes (Weiant, 1943, pl. 63); they appear to relate to both Middle and Upper Periods at that site (Drucker, 1943 a, pp. 88, 93). No flat seals (recognizable as such, at least) were found at La Venta.

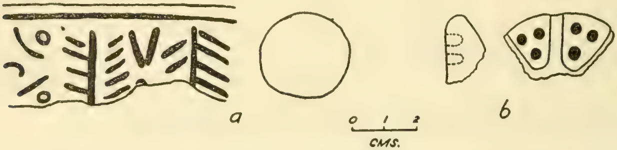

Figure 43.—*a*, Design and cross section of cylindrical "seal" fragment, Stratitrench 3, Level 2. *b*, Pottery flare (?) fragment, Stratitrench 3, Level 1.

Weights.—A number of small objects, varying from lozenge-shaped to biconical in outline and more or less circular in cross section, with encircling grooves about the long and the short axes, were collected (pl. 42, *left*, *h–k*). They range in length from 3.4 to 6 cm. It seems rather obvious that they were made with some purpose involving suspension in mind, but whether they were intended for fishing gear or to weight hanks of fibers on a loom is impossible to decide.

Objects of identical type were found at Tres Zapotes (Weiant, 1943, pl. 65). The nearly spherical clay objects with single encircling grooves found at Tres Zapotes (Drucker, 1943 a, pl. 43 *f*, *g*, et passim) were not found at La Venta.

Earplugs (?).—One flattish cylindrical object, made of a well-fired finely divided paste, with thin walls and very thin flanges at either end, was found in one of the test trenches (pl. 42, *left*, *d*). It appears to be one of the objects for which use as ear ornaments has been suggested, although its flanges are a trifle wider, and more fragile in appearance at least, than most of the clay "earplugs." With its wide flanges, forcing it into the perforated lobe of an ear like a collar button into the neck band of a shirt must have been an unpleasant process. The distribution of objects of this general form has been traced by Kidder, Jennings, and Shook (1946). From another trench came a short solid object deviating from a cylindrical form through the slight concavity of its sides. This might have been an earplug of different type, or it may have had some other use.

Flares.—A fragment from Stratitrench, 3, Level 1, suggests in its form that it may have originally been a flare of some sort, perhaps like the finer objects of jade and other precious materials from

Kaminaljuyú (pl. 21, *c*). The specimen is apparently broken out of an original circular form, which had a flat face and increased in thickness on the back from rim to center. There is no indication as to whether it had a hollow cylindrical stem or not. The face was heavily channeled into a ring of keystone-shaped segments; the two segments of the present fragment each contain three deep punctations made while the clay was still soft. If the object's outline was a regular circle, its diameter must have been in the neighborhood of 7.2 cm. The possibility that it might have been a flat stamp should not be overlooked.

Problematical objects.—A curving fragment of Coarse Brown ware, with an incised arc that may have been part of a circular border, and six irregularly spaced perforations made with an implement with flattened elliptical cross section, was found in Stratitrench 1 (pl. 21, *h*). It is impossible to determine whether it is a piece of a figurine, a toy, or a rattle. There is no evidence that the pottery sieves for washing the lye-soaked maize were manufactured or used at La Venta.

Another problematical object has a cylindrical stem that tapers to a wide flat blade with a rounded nock at the center of the outer edge; the outline suggests a badly nicked broadax. It is made of the same paste as that used for Coarse Buff ware, but was not as well-fired as most vessels of that ware. The object was plainly originally made in its present form; it is not a reworked object. The shape and finish of both sides is the same. The base of the cylindrical stem is the only part that shows signs of reworking, as though originally the stem was longer. A use for this object is very difficult to suggest. Its outline is reminiscent of certain design elements and ornaments carved on some of the stone monuments. (Pl. 42, *left*, *g*.)

Reworked sherds: large and small disks.—In nearly every level of the stratigraphic trenches there were a few sherds that had been more or less carefully trimmed to a rounded or elliptical form. Sizes of the finished disks vary considerably, but most of them fall into one or the other of two classes: small, often rather irregular disks under 5 cm. in diameter, and "large" disks averaging about 10 cm. in diameter. There is no indication that any particular ware was preferred. All local wares were used, those of the most common wares being most abundant, as is expectable if the maker picked up the first sherd of proper size he came across. A few incomplete pieces indicate the steps in the procedure of manufacture. The outline of the desired size was incised on the sherd, and then the sherd was battered off roughly to the edge of the line. The next step was to grind the edge down all the way around to an even convex profile. (Pl. 42, *right*.)

If any of the "potsherd spindle whorls," so common at Mesoamerican sites, had been found at La Venta, we should probably be justified in suggesting that at least part of the disks were blanks for such whorls in process of manufacture. Since all varieties of spindle whorls are absent from the La Venta collections, the only uses one can suggest would be such things as covers, gaming pieces or counters, and the like.

Weights.—In addition to the purposely made "weights" which have already been described, there were large numbers of sherds with rounded notches that suggest their reuse for suspension, possibly as net weights, or something of the sort. These notched sherds are quite varied, ranging from sherds which were unworked except for the notches which were well rounded off so they would not cut the line or whatever they were meant to be tied to, to sherds trimmed to a very regular rectangular or elliptical outline prior to notching (pl. 45). Those of elliptical forms are more common than the untrimmed and the rectangular outlines. No significant differences appeared from one level to another in regard to these differences of shape. As between the two trenches, Stratitrench 3 produced a great many more of these objects than did Stratitrench 1. (Pl. 45.)

"*Saws.*"—From most of the levels came a few sherds that had been trimmed to at least one straight edge (or were chosen because they had broken with one or more fairly straight even edge), which had been ground down heavily to bilateral bevels. The wear suggested use as saws. No such pieces were noted among the Fine Paste sherds; coarse gritty pastes seem to have been used exclusively. These sherds, especially if we assume that their original hardness was somewhat greater than it is after the centuries of erosion and leaching in the ground, were probably fairly efficient saws for materials like wood, bone, and the like, and perhaps harder ones if the user's patience lasted. They did not have to be sharp, for they provided their own cutting dust—the gritty aplastic particles in the paste.

UTILITARIAN WORK IN STONE

The La Venta excavations yielded but small amounts of nonceramic utilitarian objects. There were enough fragments, however, of such things as metates, manos, flake knives, and other articles of daily use to enable us to define a few of the common implement types.

Metates.—No complete specimens were found. On the basis of several large fragments, it appears that the typical metate was legless, with a fairly flat base, and in outline a blunt-ended ellipse, or rectangular with strongly rounded off corners. The grinding surface curves from end to end, the curvature becoming pronounced at the ends, but is flat laterally, indicating that the manos were invariably longer than the metates were wide, like modern Mexican sets. This is an important point of difference between the La Venta pieces and the legless ones from lowland Maya sites (Kidder, 1947, pp. 33 ff.) which have rimmed sides. A fairly typical specimen large enough to be measured had a maximum width of 27.6 cm., a thickness at the end of 11.5 cm., and some 30 cm. back where it had broken off, a thickness of 4.3 cm. The material was a coarse grayish basalt. Most of the fragments of metates showed signs of heavy wear. No example of a legged metate was found. In this respect, the La Venta material is in accordance with the history of the metate at Tres Zapotes, where similar legless forms occur in the Middle Period, and were replaced by legged metates in the Upper Period.

Manos.—No complete specimens were found, but a number of examples of hard stones, with elliptical cross sections showing most of the wear on the two wider sides were collected. None were rectangular. To judge by the wear of the metates, the manos must have been from 35 to 40 cm. long, that is, long enough to permit gripping them outside the edges of the metate.

Flake knives.—Flake blades of obsidian were quite common in the test pits and stratigraphic trenches. The material used was consistently black and gray obsidian ("gray" being apparently more translucent varieties of the black). No fragments with greenish hues were noted. The probable source of the material was the nearby volcanic region of the Tuxtla Mountains (pl. 44, *c*, *d*, *e*).

No complete flake blades were found. The majority of the butt fragments were retouched at the upper end so that the flake scar was removed, as was done in the case of the fine flake blades of the Kaminaljuyú tombs (Kidder, Jennings, and Shook, 1946, p. 136). Most of the present specimens show signs of heavy use, having work-chipped edges. In a few cases, a neat job of delicate retouching was done to sharpen a small area of a cutting edge, but apparently the material was so abundant that this was seldom necessary. The blades vary considerably in width, though few are much less than a centimeter in this dimension.

Other chipped stone.—The only other examples of chipped stone found were small to medium-sized chips of chalcedony with partly retouched edges (pl. 44, *g*, *h*, *i*). These implements can scarcely be called abundant, but a few examples were found in almost every level of the stratitrenches. Most of them consist of thin flattish flakes, struck off it would seem with but little prepared surface. In some cases a rounded projection was retouched on one side to produce a scraperlike form; in others a concave edge was retouched to make a sort of spokeshave. In a few instances (pl. 44, *i*) a projection was developed into a gougelike or stubby drill-like point. The specimen just referred to combines all these tool forms. Other pieces, like that shown in plate 44, *h*, show no retouching. Apparently the original edges of the flakes were sharp enough for the purposes for which made without more ado, as their slight dulling and work-chipping indicates.

No projectile points or similar objects were found.

Stone saws.—Fragments of gritty stone that seem to have been prepared and used for cutting purposes were found in most stratigraphic levels. Most of them show little evidence of elaborate trimming, beyond the evening off of one edge and tapering it bilaterally to produce a cutting surface. The specimen shown in plate 44, *a*, is a piece of an unusually well-made saw (from Stratitrench 3, Level 1) which was ground to a flattened elliptical cross section with rounded end(s) before the tapered blade was cut. Many of the saws are of especially compact sandstone, or of trimmed-down plaques of what appear to be concretions (?) in the local country rock.

The large flat sheet of the concretionlike material may be an unfinished saw, or it may have been intended as a small grindstone. Both sides are ground off evenly, and are quite flat from edge to edge. The upper and the right-hand edges show some evening, but are not beveled (pl. 44, *b*).

Pumice polishing stones.—Several bits of pumice, with worn-down areas, were found. The best preserved of these is shown in plate 44, *m*. They seem to have been trimmed, or worn, to an elliptical form, with one wide flat surface, as though they had been used for polishing.

Hammerstones.—A few rough water-rounded cobbles were found that have been used as hammerstones (pl. 44, *n*, *o*). One of those shown (pl. 44, *n*), is a round nodule of reddish-brown chalcedony that took considerable battering before it broke. The entire original surface, that is, the waterworn area outside the break, is heavily abraded. The other specimen figured is battered chiefly on the wide end (that to the left in the plate).

ORNAMENTAL WORKED STONE

The stratigraphic cuts yielded but little in the way of ornamental stonework, but the few objects of jade and the like from them are especially important in confirming the association between the ceramic materials from these trenches and the elaborate jades from the excavations in Complex A. For the present the trench materials will be listed only; discussions of types represented will be deferred to the chapter dealing with the Complex A series.

From Stratitrench 1 came the following objects:

Level 5: Fragment of Type B earplug of mottled (light green and white) jade (pl. 44, *k*).

From Stratitrench 3 came:

Level 1: Subspherical bead of yellowish-green jade with biconical perforation (pl. 44, *f*).

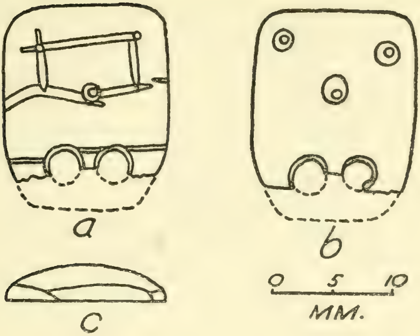

Figure 44.—Green jade "plaquette," from Stratitrench 3, Level 3. *a*, Upper surface, polished, with saw cuts. *b*, Flat unpolished undersurface. *c*, View of upper (unbroken) end (2 x).

Level 3: Small elliptical plaquette of yellowish-green jade, with one flat, one convex side, five perforations (two conical, three biconical), connected on convex side by saw marks (fig. 44).

Level 4: Body of (apparently seated) figurine, head, limbs broken off, made of serpentine, badly eroded (fig. 45).

Small rectangular plaque (pendant?) with rounded corners, of serpentine. No perforation, but may have been one or more in portion broken from one end (pl. 44, *j*).

CHRONOLOGY

The discussion of the principal ceramic types—wares and figurines—has noted time after time the strong resemblances between the La Venta materials and those from the Middle Period of the Tres Zapotes occupation. By and large there can be little doubt that the two strata, that composed of the successive La Venta deposits (even with the slight gap between them), and the Middle Tres Zapotes deposits, represent two local manifestations of the same ceramic pattern, and not only that but the same developmental or evolutionary phase of that pattern. The general picture of a complex of chiefly monochrome wares, with elaboration of incised and impressed design, occasional incidence of simple painted decoration, the nearly identical trend toward increase in preference for the Fine Paste wares, the occurrence in both strata of figurine types similarly elaborated from ancestral patterns; and the specific occurrence of identical figurine types, all adds up to a strong argument for close kinship and probably contemporaneity. In other words, we have warrant for modifying the designation of the middle segment of the Tres Zapotes ceramic column from "Middle Tres Zapotes" to "La Venta-Middle Tres Zapotes," or more simply, we may call it the La Venta period.

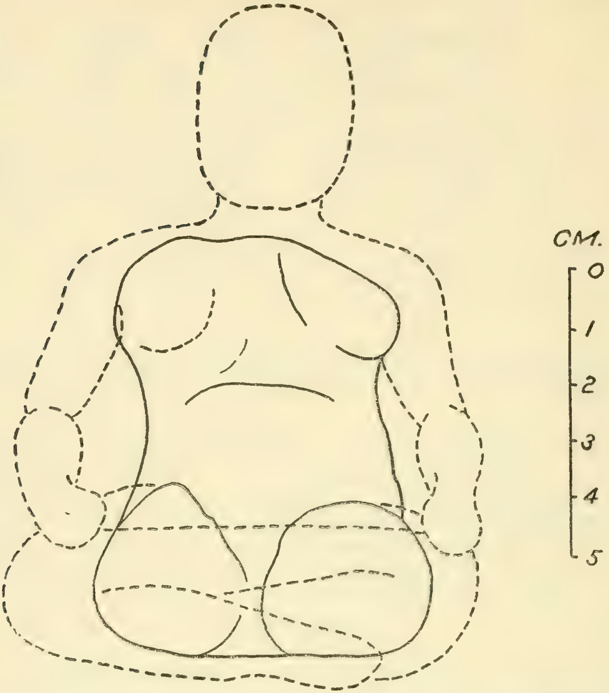

Figure 45.—Suggested reconstruction of serpentine figurine fragment (Figurine 7) from Stratitrench 3, Level 4. (See also pl. 33, *left*.)

With the Tres Zapotes sequence tied in, it is not too difficult to place the La Venta period in at least an approximate temporal position relative to other Mesoamerican horizons. It must be owned that if the La Venta materials formed an isolated segment their deceptively simple appearance might mislead one into suggesting an earlier chronological position than fuller facts permit. That is to say, since they are essentially monochrome wares, with only the simplest sort of painted decoration, and accompanied as they are by handmade figurines of archaistic types, we might have been tempted to regard them as representing a ceramic complex of Middle Culture order, and from that have proceeded to an erroneous Middle Culture dating. However, since they are so specifically like Middle Tres Zapotes we can draw on the evidence of the preceding and subsequent horizons of Olmec culture to place them.

Lower Tres Zapotes, the horizon from which that of La Venta developed, is not as helpful as it might be, although in a general way by its content of pottery traits that recall both Mamom and Chicanel elements of the early Maya sequences, it suggests that La Venta can scarcely be earlier than the upper phases of Chicanel. There might be a slight overlap, but it can scarcely be more than slight. Upper Tres Zapotes, on the other hand, is very easy to define in Mesoamerican relative chronology. Its termination is cleancut: it lacks true Fine Orange ware and metals, and therefore must have ended before the beginning of the Fine Orange horizon. That it did not end long before this, however, is demonstrated by the occurrence of both copper ornaments and wares closely approaching Fine Orange from the nearby Catemaco-Santiago Tuxtla region, which on the strength of Valenzuela's evidence seem to represent a lineal descendant of Upper Tres Zapotes. The beginning of Upper Tres Zapotes is marked by an influx of a host of new ceramic traits, all apparently introduced from alien sources: elaborate polychrome decoration, cylindrical tripod bowls, an infinity of elaborate mold-made figurines, and many other locally novel forms. Many of these features are so specifically like elements diagnostic of Teotihuacán that they must represent the sudden opening up of channels of communication with that culture, if not actual intrusion of small groups of bearers of that culture. However, the new elements would seem to have come from Teotihuacán IV rather than from the Teotihuacán III phase which is now known to have influenced ceramic complexes in highland Guatemala and in the Petén. The evidence for this Teotihuacán IV derivation is based at present chiefly on the exuberance and abundance of the mold-made figurines that appear among the introduced traits; such hints as those given by apparent modifications of Teotihuacán III features—for example, cylindrical tripods with cascabel or other forms of legs rather than the classic "slab" form—point in the same direction, but cannot be evaluated precisely until a study of Teotihuacán IV materials has been made comparable to Armillas' invaluable contribution in which he worked out the component diagnostic features of the periods I to III.[16] It would seem that the Teotihuacán influences that reached Kaminaljuyú during the Esperanza period and which are reflected in Tzakol finds in the Petén must have traveled by way of the rugged highland of Oaxaca and Chiapas, or along the Pacific coast; they did not penetrate to the Olmec region of the Gulf coast until considerably later.[17] In short, it appears that Upper Tres Zapotes is to be regarded as more or less coeval with Teotihuacán IV, and thus, also approximately, with the Mayan Tepeu period. By this devious and roundabout line of evidence, there is nowhere else to put the LaVenta-Middle Tres Zapotes period than in between, or roughly contemporary with Tzakol. I believe this La Venta-Tzakol equation to be fairly sound, even though it is laborious, though I must admit that it would have been less painful and more glamorous to have had the good luck to have found a pile of basal-flanged bowls in the Tomb of Mound A-2. The source of the difficulty seems to lie in a fact I pointed out in discussing Middle Tres Zapotes remains: that during this period the Olmec region seems to have been culturally isolated. There were, of necessity, contacts with other groups—witness the wide ocurrence of Olmec jades—but by and large the region seems ot have been off the main trade routes until the Upper Tres Zapotes period when all at once the host of new elements explodes onto the scene. So far, we have only one suggestion of important outside influence during the La Venta period, but it may be a very significant one: the presence of volcanic ash tempering in the Fine Paste wares of La Venta that appear on this horizon and begin their steady increase that lasted to the end of the Olmec occupation, although in altered forms. Elsewhere it has been suggested that these wares may have reached Olmec territory from the eastward, spreading thereupon from the La Venta district toward that of Tres Zapotes (Drucker, 1947, p. 6). The type of tempering material, if not the wares themselves, point to Mayan influences during Tzakol times.

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[16] Armillas, 1944 a. The differences in figurines are at present the chief diagnostic of the differences between Periods III and IV. Armillas suggests that in the main in Teotihuacán IV "it seems that (vessel) types of the preceding period persist with some modifications in decoration and frequencies" (op. cit., p. 11).

Not only the extensive constructions at La Venta, all seemingly made during the single period, but also the noteworthy depth of the deposits (totaling 3 m., plus what deposit fills the gap between them), exceptional in view of the evidence of their having been left by a small population, suggests that a fairly long time may be represented. When the final Uaxactum report appears we shall be in a better position to judge whether or not the estimated beginning dates not only for La Venta but for the Tzakol period might not better be set back somewhat earlier than present opinion usually sets them.

A point that derives from the chronological placing of the La Venta horizon is the apparent incongruity between this best estimated position and the general pattern of the ceramics, and likewise between the development of the art of sculpture and the ceramics. That is, the ceramic complex, stemming as it did from the Lower Tres Zapotes pattern with but minor modifications and a few additions, could be considered a Middle Culture survival that hung on long past its time, despite new trends developed in neighboring regions and also despite artistic development in Olmec culture itself. Just what this fact signifies in general terms of Mesoamerican culture growth is not clear, except that it points to the fundamental importance of intercultural stimulation as a key factor. But this fact does point out a caution: there was not necessarily a steady and uniform culture growth throughout the area—all ceramics of "archaic" appearance are not necessarily of the same age.

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[17] The same diagnosis of period of Teotihuacán influences applies to the specific Teotihuacán elements noted in Cerro de las Mesas Lower II, in which cylindrical tripods appear along with elaborate mold-made figurines, etc. This indicates that the equation of Lower II of Cerro de las Mesas with Teotihuacán III as suggested in "Kaminaljuyú," (Kidder, Jennings, and Shook, 1946, p. 257) will not hold, on present evidence, at least. Teotihuacán IV seems to be the period that most strongly affected the Gulf coast.

PART II: THE SCULPTOR'S ART

The battered potsherds from the occupational areas at La Venta represent the prosaic day-to-day life of the ancient inhabitants. Household wares, made for, used, and discarded in the daily round, give us little insight into the esthetic abilities of their makers. Yet the ceramics were made by the same group from whom came the artists who carved the massive monuments and the delicate jade objects. It is fortunate that in addition to the fact that the pottery and sculpture comes from the same one-horizon site, we have a few more precise cross ties: the occurrence of a few fragments of small jade and serpentine objects in the stratigraphic trenches (see p. 146), and the finding of a number of pottery vessels of wares represented in the tests and stratitrenches in the Ceremonial Court. The carvings of jade and other special materials from Complex A make it possible to round out the cultural picture on the esthetic side. The present chapter deals with the products of the sculptors and lapidaries of La Venta.

A glance suffices to assign a number of the jade objects to a Mesoamerican art style which for some time has been recognized as unique. This art has hitherto been known almost entirely from objects of jade and similar materials, and a few pottery pieces, for the most part of unknown provenience and never with clean-cut cultural associations. The La Venta series is the first to have been found with ceramic context. Nonetheless, a number of writers, including Beyer, Saville, Lothrop, Vaillant, and Covarrubias, have assembled enough of the stray pieces to enable them to define some of the outstanding features of the art style, and to lead them to suggest both a probable center for it in southern Veracruz, and a tentative ethnic association with the legendary Olmec.[18] Thanks to these studies, the style has become well known enough so that traces of its influence have been recognized in materials from other cultures, as Lothrop has done, for example, in the case of certain Naranjo stelae (Lothrop, 1941). Interest in the art style led to an archeological conference at Tuxtla Gutiérrez in 1942 on the Olmec, that is, an appraisal of the references to them in Mexican traditions, and what could be surmised of their culture from a study of the jade figurines attributed to them.[19]

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[18] See: Beyer, 1920, 1930; Saville, 1900, 1929; Vaillant, 1941; Caso, 1942; Covarrubias, 1942, 1943, 1944 a and b, and 1947.

[19] "Mayas y Olmecas." See particularly the excellent stylistic definitions by Caso and Covarrubias (pp. 43 ff.; 46 ff.).

At this time, data on many unpublished specimens were made available, making it possible to trace the range of distributions of the distinctive figurines themselves: from central Mexico to Costa Rica.

Most of the 1942 jade series was found just prior to the conference at Tuxtla Gutiérrez, so that it was possible for Stirling to exhibit them there and discuss them. (See also Stirling, 1943 b, and Stirling and Stirling, 1942.) However, the temporal relationship of the ceramics had not been defined at that time. Also, the range, in treatment and in subject, of the art style was extended considerably by the part of the series found in 1943. For these reasons the small sculptures from Complex A will be described here in considerable detail, even at the risk of some repetition, for the purpose of isolating their stylistic attributes. From this base we shall proceed to a comparison of the art style of the jades with that of the stone monuments at the site, seeking out points of similarity and contrast in theme and in treatment of detail. Through these steps we may arrive at a balanced and fairly accurate definition of Olmec art, and thus be in a position to make wide-ranging comparisons.

THE SMALL CARVINGS

As a preface to this account of the carvings in jade and similar materials, it is necessary to point out that I have had to depend heavily on photographs for the basic data, particularly for the 1943 series of objects, rather than basing the study on the materials themselves. I had ample opportunity to examine the 1942 specimens, of course. Recently through the courtesy of Dr. de la Borbolla, I was able to make a brief examination of the 1943 collections, but spent most of my time with the more glamorous figurines and engraved designs, and slighted the plainer beads and simple pendants. I did not have the time to make precise color determinations of the materials, nor a complete series of measurements. However, I feel that for an art analysis these deficiencies are not of major importance, although I should have preferred present descriptions more nearly complete in all respects. In studying stylistic details, I had the advantage of having excellent sets of photographs to work from, those of the 1942 materials taken by Sr. Luis Limon A., of the Museo Nacional, and Wedel's pictures of the 1943 specimens which he was kind enough to place at my disposal, in addition to the regular expedition series of photographs.

FIGURINES REPRESENTING HUMAN BEINGS

The first group of objects to be described consists of 12 small representations of the human form. Seven come from the 1942 excavations: four, all of jade, were found with the bundle burials in the tomb, one of serpentine was in the stone coffer, and two battered headless figurines of serpentine came, one from the mound fill near the tomb, the other from Stratitrench 3. Of the five found in 1943 four are also of serpentine, the fifth, the one in a dancing posture, is of an unidentified compact dark brown stone.

The first of these pieces, Figurine 1, is beyond any question one of the outstanding masterpieces of native American art (pls. 46, 47). It is a small seated figure representing a woman, carved of a whitish jade with mottled areas of a light bluish gray. It had been placed with the second of the two bundle burials. The highly polished surfaces of the stone are partly concealed in the photographs by the cinnabar paint with which it was covered; it was considered preferable to leave some of this material since it serves to bring out the features more strongly, and also, removing it would loosen the small polished hematite mirror or ornament on the breast. The figure is represented in a seated position, legs crossed, with the right foot in front. The arms are folded over the breasts, so that the right hand is above the left. A short kiltlike skirt is indicated. Limbs and body are represented in a simplified manner, the curving outlines of shoulders, arms, and legs, and the gentle modulations of the breasts, giving an impression of considerable realism. The body is small in proportion to the head, drawing attention to the latter. It is in the treatment of the head and features that the excellence of the piece appears. The head, slightly tilted back, conforms in breadth to the rather wide face. In its height it suggests artificial deformation. The neatly combed hair is indicated by fine grooves, and hangs in bangs across the forehead, with a lock on either side in front of the ears and the remainder hanging loose down the back. In the ears are a pair of hollow ear spools. The facial features are carved to indicate a gentle smile. The eyes are represented by two elliptoidal pits with sharp edges. The lower borders are neatly straight, inclining slightly toward the inner corners; the upper borders are more strongly arched. To judge by other specimens, they probably were inlaid with some mineral. Cheeks have been given simple but subtle curvature. The nose is low, and only moderately broad; the nostrils are formed by drilled pits which connect to indicate a pierced septum. An abnormally short integumental upper lip is shown; that is, the nose is directly above the membranous area of the lip. This is a very characteristic feature of all these figurines, and one which augments the impression of heavy thick features. The relief of mouth and lips is increased by a pit in either corner. Teeth are revealed by the parted smiling lips. Both teeth and lips are indicated by means of shallow grooves, as are eyebrows, convolutions of the ear, and as mentioned, the hair.[20] The impressiveness of this figure lies in its realism, of which the delicately captured smile is but one feature. One is struck by the thought that it must be a portrait, carved by a master craftsman. Yet as will be shown, this little lady belongs to the same style as the other more stylized, less beautiful figurines to be described.

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[20] It is to be noted that this grooving is not incised ornamentation, for it consists of shallow rounded depressions, ground or "sawed" in with a thin-edged tool, not scratched or cut in.

The second figure (Figurine 2) found in the first bundle of the tomb, is of a beautiful mottled bright-green and white jade (pls. 46, 47). It had been broken, but by good fortune is complete, and could be mended. It is likewise seated cross-legged, but in this case the hands rest upon the knees. The body is in more nearly correct proportion to head size. The broad thick shoulders and heavy pectoral muscles give it a very masculine appearance. Hands and feet, as in the case of the female figure, are very simply indicated. Head and face are a step more stylized, and lack, notably, the outlining grooves that contribute so much to the vivacity of expression of the female figure. The head is obviously deformed, and of a sort of truncated conical shape with a projection to the rear. Hair is not portrayed, but there is a head band shown. The general outlines of the face are similar to those of the companion piece, except that it is heavier jowled, with a more massive jaw. The eye pits are nearly level along their long axis, and more regular ellipses in form. The nose is shown in the same way in both pieces, and is directly over the membranous part of the upper lip. The mouth is open, but unsmiling, the lips are heavier, and are indicated by relief alone. The edge of the upper teeth are shown, without outlining. Drilled pits in the corners of the mouth are very pronounced. In general, it may be said that this figure departs from realism to the extent that it approaches more closely the previously recognized examples of the art style.

The next two figures are alike in that both are of the same variety of jade, both are shown in the same posture, and they are considerably more stylized than the preceding two. One was found with the female, one in the bundle with the male figurine. Both represent males, in a standing posture. Both are of a uniform, very dark grayish-blue jade, and very highly polished.

The other standing figure, Figurine 3, is not only taller, but of a somewhat thicker piece of jade, thus permitting more roundness and fuller relief (pls. 47, 48). The head, slightly tipped back, is of the same truncated conical form as that of the companion piece, but lacks the head band. The face is not quite so broad, the jaw is heavy, but the jowls are less prominent. The features are shown in relief, without lines. The eyes are sunken pits, similar in form to those of the female figurine—with straight lower and arched upper borders, but in this case they slant down to the outside, rather than from the outer ends to the nose. The nose is low and wide, though slightly narrower than the mouth. Nostrils are the same as in preceding specimens.

The mouth is heavy lipped, slightly open, but with no indication of teeth. The upper lip is a band which touches the nose at its apex, narrower at the ends than in the middle, concave downwards. The lower lip follows this curvature in a lesser degree. The drilled pits at the corners of the mouth, are as in the other male figurines, below the general line across the mouth. The body, again joined to the head by a stumpy neck is nearly as simplified as that of the other standing figure, with angularly cut-out arms and legs. However, the increased roundness of the body transversely, and slight modifications to indicate joints at elbows, wrists, waist, and knees give it a much more realistic appearance. Hands and feet are similarly treated, except that fingers and toes are suggested by slight grooving. The same method is used to represent a narrow belt and breechclout.

The first, Figurine 4, that associated with the female figurine, is the shorter of the two (pls. 47, 48). It is carved from a rather flat thin piece of stone. The head exceeds that of the seated male figure in deformation, being in the form of a truncated cone, and markedly constricted in width. It also has a head band at the base of the deformed area, and no indication of hair. The face is broad, flat-featured, and heavy-jowled, being wide at the base. The ears are represented by long thin rectangles, with large perforations indicating ear spools at their lower ends. Features are shown in relief, that is, by convexities and hollowed-out areas, without the use of accentuating grooved lines. The eyes or eye sockets are oval in outline, with the points to the outside, and slant inward very slightly; in each of the oval concavities is a large conical drilled pit. Brows are shown by gentle relief, as are the pouchy areas under the eyes, and the cheeks. The nose is low and very broad. The alae are bounded by the same depression that marks off the ends of the mouth. Nostrils are indicated by drilled pits, connected at their inner ends. The membranous lips are very heavy. The upper one, which begins just below the nose, is straight across the top, concave along its lower edge, the lower corners marked by drilled pits. The lower lip is a low inverted **U** in shape, conforming to the curvature of the lower edge of the upper lip. No teeth are shown. The body, barely separated from the head by an inadequate neck, is simplified to very near a representational minimum. The whole figure is very flat and angular, despite the impression of roundness given by the curving shoulder outline and the rounded edges. The legs are completely angular laterally, separated from each other by a tapering vertical saw-cut. The arms are not completely separated from the sides, but are marked off by fairly deep straight (sawed) grooves. Drilled holes perforate this sawed area, one on either side at about the waistline. Light curving grooves mark the tops of the legs or indicate a breechclout. Hands and feet are most summarily treated. Neither fingers nor toes are indicated; the arms simply taper off at the ends, and the feet are represented by angular projections at the lower ends of the legs.

The last of the complete figurines, Figurine 5, found in 1942 is that from the stone box (pl. 49). It is of a light yellowish-green serpentine. It is larger than the other standing figures, and less finely carved, but in other respects is very much like them. The head, large in relation to the body, rises to an elongate flat top, cylindrical rather than conical. A number of tiny drill pits may be meant to indicate hair. The face is wider at the base than at the top. The eyes are long round-ended elliptical pits. In each of them, two small pits may be seen, suggesting that they may have been made by drilling a series of small holes and cutting away their borders. The outer ends of the eyes are slightly lower than the inner ends. The nose is low, broad, with drilled nostrils. As in other pieces, the mouth is immediately below the nose, thick-lipped, drooping toward the outer corners which are marked by drilled pits. The ears are long narrow rectangles, with a perforation in each for the ear spool. The body is nearly neckless, with sawed-out arms and legs modified to give a more realistic appearance. In general effect—the massive rounded shoulders, long arms, slightly sprung-kneed stance—the body suggests that of a muscle-bound heavyweight wrestler. Fingers, toes, elbows, the line of the pectoral muscles, and a breechclout are all indicated by shallow grooved lines.

The incomplete serpentine figurine (Figurine 6) from Mound A–2 was probably very similar to the specimen just described. The head unfortunately is missing, and what remains of the body is considerably eroded, so that it offers few distinguishing features, other than a generic similarity in proportions and simplicity to the other standing figurines.

The other incomplete serpentine specimen, Figurine 7, from the stratigraphic trench, is so badly eroded that little detail can be seen in it. The convexities at the pectoral regions, over the belly, and at the hips, suggest that originally it was skillfully and realistically carved. The back is nearly straight; a slight line indicates the form of the buttocks. The breaks where the legs were attached indicates that they were extended forward, or perhaps crossed, so that the figure was probably in a seated posture. The rather plump proportions suggest those of the seated female figure from the tomb. No indication of dress remains.

Of the five figurines found during the 1943 season, two are quite like those already described. The first, Figurine 8, is represented in a standing posture, elbows at his sides, forearms extended forward (pl. 50). The head is elongated, with a flattish dome on top, and a projection to the rear that must represent artificial deformation. The face is heavy and of maximum breadth at the jowls. An undulating line above the brows represents the hairline across the forehead. The eye orbits are deep pits, with curved upper and nearly straight lower edges. The nose is made to appear more wide and flat than it is by drilled pits indicating the nostrils. The mouth is formed by a thick strongly arching upper lip, which nearly touches the nose, and a somewhat angular lower lip, likewise highest at the middle, separated by deeply drilled pits in the corners of the mouth and flat depressed area that looks like a tongue but which probably represented upper teeth, for it bears a drilled pit presumably for an inlay. The ears are long narrow ridges on the sides of the heads, perforated at their lower ends by large biconical perforations. The body is a little small in proportion to the size of the head, but strongly modeled. The areas of the shoulder muscle masses are outlined on the back by incised lines. A flat triangular area on the lower abdomen gives the impression of a pudgy fat belly. Hands and feet are very simply indicated.

The second figurine, Figurine 9, of this group is standing in the same posture, with lower arms extended forward (pl. 50). It is slightly smaller than the preceding. The head is lower and more dome-shaped, but also projects to the rear. The facial outline is similar to that of the specimen just described, broad and heavy in the jowls, but appears even more massive because of the lower head. The eyes are deep ellipses, one of which contains a small obsidian inset, which gives the face a rather unpleasant wide–eyed glare. The nose is broad, with flaring alae, and drilled pits at the nostrils. The thick everted lip which begins just below the nasal septum is less strongly arched than in the preceding figurine, and the lower lip turns upward slightly at the corners, though in its middle portion it has a slight upward curve. There are deep pits at the corners of the mouth. Ears are shown as long low ridges alongside the head, with biconical holes through their lower portions. The body is small, but gives an impression of massiveness in the breadth of the shoulders and the thickness of the arms and chunky body. Hands and feet are as usual indicated in very simple manner.

The third figurine, Figurine 10, varies somewhat from the others (pl. 50). Its posture is similar although the knees are more bent. The difference lies in the fact that, viewed from the front, the head is low and quite wide, giving it a somewhat froglike appearance. The maximum width is across the cheekbones but the bigonial width is only slightly less. There is a slight crest along the top of the head, and a very marked elongation to the rear, suggesting a somewhat variant type of deformation. The large elliptical eyes are filled with inserts of iron pyrites (?). The nose is short and very broad. Immediately below it are the thick lips, both of which curve upwards in the center, and which are separated by drilled pits at the corners and a narrow area representing teeth. The ears are low ridges perforated at their lower ends. The body is squat and pot-bellied, arms and legs relatively shorter than in the other figurines, and in general more infantile in appearance. This is, incidentally, the only infantlike figurine among the ten complete and the two fragmentary specimens of jade or other stone from the site. Hands and feet are impressionistically represented.

Figurine 11, the last of this group of figurines seems to be a dancer, with head tilted back, arms folded across the chest, and knees strongly flexed (pl. 51). The figure is well-balanced, so that it stands solidly without propping in this vigorous pose. The facial outline varies from the usual type, although the head is elongated, for the chin is smaller and somewhat more tapered than is usually the case. Other features vary too. The eyes, filled with inlays of the same material as those of the short broad-faced figure, are tapering ellipses, the nose is broad and somewhat high, the lips protrude but lack the borders that produce the characteristic thick everted appearance of the companion pieces. The drilled pits at the corners of the mouth are lacking. The ears are fairly typical long vertical tabs, with perforated lobes. The body, as has been mentioned, is represented in a dynamic posture, and with a remarkable simplicity of line. The crossed forearms taper off into low relief, the crouching legs are shown as three almost equal masses, from the side (thighs, lower legs, and feet), that flow one into the other, anatomically incorrect, perhaps, but giving a feeling of solidity that makes the figure "stand," and that balances the back-tipped head. Incidentally, this piece is quite similar, though not quite as well executed, to the magnificent little figure in the Covarrubias collection from the district of Iguala, Guerrero (Covarrubias, 1944 a, second plate).

The fifth of the 1943 figurines, Figurine 12, that found in association with the decorated earplugs, is of a soft serpentine, or possibly of limestone (?) (pl. 52). Allowing for its poorer preservation, it resembles the blue jade figurines from the tomb in proportions and general treatment, having a long flattish body quite simply treated. The outline of head and face is the familiar one, squarish across the top, with maximum width across the heavy jowls. Eyes are indicated by fairly deep elliptical pits; Wedel informs me that originally there was an obsidian (?) inset in one eye which was lost. The nose is broad, with drilled pits at the nostrils, the thick upper lip joins the base of the nose. The corners of the mouth are pulled downward, and have drilled pits at the corners. A line across the forehead may have marked the edge of bangs (like those of the seated female figure from the tomb). The forearms are represented in relief folded over the belly; the upper arms are marked off by channeled lines that curve to suggest bulging biceps. The lower part of the abdomen is indicated by round grooves. Shoulder muscles and those of the outsides of the legs are shown by realistic curvatures at those points, and the structure of the hips, in front view, is very accurately defined. The feet are simplified to blunt stubs, and the legs are separated by a saw cut, as are those of the blue jade figures.

EARPLUGS

The transition from figurines to earplugs is facilitated by the occurrence of a pair found in 1943 in the stone slab cist which have incised on their faces (the nomenclature of these objects and their parts follow that given in "Kaminaljuyú," fig. 43), conventionalized human profiles. These drawings are of the extremely stylized elongated type of representations of human faces in profile that have been found elsewhere on celts and plaques, and are adapted to the decorative field by being curved around the margin of the throats of the spools. In each case the thick upper lip is directly below the open mouth with stubby fangs. The pip-shaped eye has a slight inward inclination. The ends of the head terminate in highly modified patterns that suggest heads of some raptorial crested bird. Behind the head is a dot and circle, with two appended short scrolls. The heads are reversed, one facing right, one left, so that they would both face forward (or backward) when worn. The spools themselves correspond to the Kaminaljuyú Type B in their abrupt flare from the throat, and their wide irregular faces. The face of one approaches in form a rectangle with rounded corners, that of the other is more nearly circular, but has a tablike protuberance opposite the incised head (fig. 46, *b;* pl. 52). With this

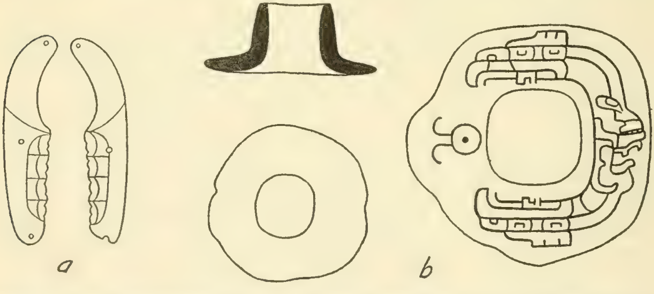

FIGURE 46.—*a* Jade pendants. *b*, Face and profile, showing better preserved of the designs, of pair of earplugs from Stone Cist. (Not to scale.)

pair of plugs, as though part of the assembly, was found a pair of small pendants carved to represent deer jaws, and a pair of tubular beads.

Also found in 1943 was a pair of large earplugs with a more gradual flare, corresponding to Kaminaljuyú Type A. They are undecorated, and nearly matched in size and color. With them were a pair of pendants, rectangular with markedly rounded-off corners of green jade, and two slim curved rodlike pendants of dark blue jade.

Another set of ear spools in the 1943 collections are small in size, and not closely matched in color. They are of Type A, in form. One of them consists of a separate flare and stem. The latter element is smaller in bore than the flare, and if the two parts were actually worn together, must have been joined with some kind of expander (as in pipe fitting) of some perishable material. With them were a pair of pendants in the form of jaguar canines, and a pair of tubular beads.

In 1942, a pair of large Type A earplugs was found in the Stone Coffer (pl. 56, *right*, *f*, and *g*). They are well-matched in size and form, even to the four only fairly evenly spaced small perforations in the flare areas. In color the pair is mismated, one being a light mottled white and green, the other a darker hue of green. A pair of pendants in the form of stylized jaguar canines accompanied them (pl. 57, *b*).

Other examples of earplugs consist of two odd specimens from the mound fill outside the tomb. Both are of pale mottled green and white jade, of only fair quality. One is rather thin, with a narrow rounded rim about one end of the stem. It is essentially a cylinder with a slight flange, very like one form of pottery "earplugs" described by Kidder (Kidder, Jennings, and Shook, 1946, p. 215). The other is thicker, with an abruptly flared, irregular face (Type B).

There seem to be several points of difference between the La Venta earplugs and those of Kaminaljuyü which have been so meticulously described, although most of the La Venta specimens can be included in the two types, "A" and "B", defined for the highland Guatemala site. For one thing, the specimens listed above as conforming to "Type A," have proportionately longer stems, or perhaps we might say that flares and stems are one-piece, rather than two-piece as are the Kaminaljuyú Type A flares. Also, "throat discs" are not represented at La Venta, nor are backings, suggesting a consistent practice of assembling the jade plugs with perishable accessories. A third distinctive feature is that with four pairs of earplugs, pairs of pendants (or pairs of pendants and tubular beads) were found one by each earplug as though they had somehow been attached, and indicate a different style of assembly from that of the Mayan highland. Finally, the cylindrical plug is a rare form in jade, though pottery specimens of the same or nearly the same form have a wide if sporadic distribution.

PENDANTS FOR EARPLUGS (?)

Of the pairs of pendants found in positions indicating they had been attached to earplugs, two pairs represent jaguar canines. One pair is rather stumpy in its proportions, and flattened on the back with a low longitudinal ridge down the midline (pl. 57, *a*). Each has a single perforation at the tip of the root end. A pair of tubular beads was found near the plugs and pendants.

A pair of jade pendants comes from the Sandstone Coffer (pl. 57, *b*). This is a matching pair, and about the size of the jaguar canines which they are carved to represent. Each pendant is a longitudinal half of a canine, and deeply hollowed on the inside so as to be translucent. A shallow groove across the middle of each fang seems to represent the border of the enamel. One specimen has three small perforations, one at each end and one in the middle; its mate has four, the extra one being close to the "enamel line."

Two pairs of pendants were found with the earplugs engraved with the stylized profiles. One pair consisted of blunt elliptical plaques of light green jade, with slightly concave faces, and single perforations at one end. With them, apparently part of the assembly, was a pair of small slender curved pendants or bobs of dark blue jade. The latter are slightly bulbous at their lower (?) ends. They may represent highly stylized tusks or fangs. (Pl. 57, *d*.)

The third pair of pendants appear to represent halves of a deer mandible. The molars (four are shown on each piece) are indicated by incised lines. Each pendant has three small perforations, one at either end and one at about the midpoint. The objects differ slightly in both size and color. The darker had been broken off at the upper (proximal) perforation, and the edges of the break were ground smooth. A pair of tubular beads accompanied these pendants and earplugs (pls. 52 and 57, *c;* fig. 46, *a*.)

PENDANTS (OTHER)

The mode of use of other objects classed as "pendants," because they are perforated for suspension in some fashion, is unknown. Some of them were probably used on necklaces. Others may have formed parts of elaborate headdresses such as are to be seen on many figures of the altars and stelae. The perforations are about the only feature these varied objects have in common.

A pendant of uncommon type is of bluish-green jade, carved to represent the bony serrated spine of a sting ray tail (pl. 53, *right*, *d*). The upper side has a pronounced ridge down the center between the stylized rectangular barbs; the rear is convex but unridged, with slanting sawed lines to indicate the barbs. It has a perforation at the proximal end. It was found in the tomb associated with a small bundle of real sting ray tail spines, each with a perforation like that of the jade copy. Kidder has recently pointed out the possible ritual use of the spines; these may have had a dual use as pendants.

The tomb also contained a pendant in the form of long slightly tapering quadrilateral with rounded corners made to suggest a half of a long narrow clamshell (pl. 53, *left*). The hinge at one side is realistically shown, and on the outer edge of the "hinge" are two pairs of perforations, each formed by two conical holes drilled at an angle so as to meet. The outer perforation at one end had broken out, and the edges of the break were evened off. The material is light-grayish-blue jade. The outline of the object reminds one of the rectangular objects shown on the necklaces of several figures on the stone monuments.

A small object of very dark green jade found among the tomb materials may have been some sort of pendant, although it is much smaller than the objects just described and would have stood out only by itself or on a necklace of very small beads (pl. 54, *d*). It suggests in its form a very stylized animal or bird head, with two deep rounded pits for eyes, separated by a low ridge. The other end is a rounded flattish area, with a circular tab protruding at the tip. Through the tab, and at the opposite end are small perforations for suspension or attachment.

At either end of a string of beads found in 1943 were two small rectangular pendants of jade with rounded corners, flat on one side, and with a very low ridge down the long axis on the other. A faint channel marking off the border on the ridged side increases the appearance of a turtle carapace. One of these objects has a sizable biconical perforation at the center of one end. The other is said to be perforated also, but no hole appears in the only pictures I have at hand; probably it has an oblique perforation on the under side.

A small circular pendant from the vicinity of the "turtles" just described, has two small holes near the margin, and a larger perforation at the center. Its face appears to be slightly convex in the photograph.

HEMATITE PENDANTS

In addition to the tiny plaque of hematite worn by the seated female figurine, several pendants or "mirrors" of polished cyrstalline hematite were found in Complex A. In 1942, one complete specimen and a fragmentary one were found, the former in the tomb, the latter in the fill of Mound A-2. The complete piece is a wide blunt-ended ellipse, with three small perforations around the rim. The incomplete piece is wider at one end than at the other, with a concave edge on one side, and scallops along the opposite edge. Its original form is unknown. The 1943 specimens were like the first: wide ellipses.

One, found with a cruciform layout of celts, is markedly concave, with a wide border formed by a bevel that sloped outward. I do not know at what points it is perforated. In the lot of materials which included the decorated earplugs were found the broken halves of another elliptical hematite pendant.

CRYSTAL PENDANT

From the Stone Cist came a tiny pendant (?) of rock crystal, carved in the form of a tiny skull about 8 mm. high. It has not been photographed, and I cannot describe it in detail.

SMALL FLARES

Two objects were found, one in the tomb, and one with the pair of plain earplugs with jaguar canine-shaped pendants that are similar to certain of the Kaminaljuyú small flares (Kidder, Jennings, and Shook, 1946, figs. 143, *e*, 146, *a-f*). Both have short hollow cylindrical stems, and flare rapidly. The one found in 1942 has the edge finished off in 15 rounded scallops, not quite equal in size, accented by channeled arcs that join point to point at each lobe, producing a form suggesting that of a flower (pl. 54, *c*). Two holes are drilled near the lip of the flare, almost diametrically opposed to each other. The other specimen, found in 1943 with the small earplugs with the pendants in the form of jaguar canines, is quite similar, except that its 13 "petals" are sharp-pointed rather than rounded (pl. 54, *e*).

Unlike the Kaminaljuyú forms which they resemble, the La Venta pieces do not occur in pairs. One might be tempted to suggest use as labrets, but neither the figurines nor the monumental figures wear those ornaments.

CELTS

A great number of celts were found in several carefully placed caches in the course of the two seasons of work (pl. 55). It seems obvious that these were not workaday implements, but as has been surmised from stray decorated pieces, they must have been regarded as valuable, or endowed with some ceremonial importance. As a matter of fact, there were a considerable number of celts of serpentine, which, unless their present softness is due to decomposition of the material, could never have served as tools.

The Olmec celts vary in size and form, but most of them are rather slender, tapering laterally toward the rounded poll. A few have blunt squared polls, but even in these there is a noticeable taper from the bit upwards. Bits are symmetrical, and usually curving from side to side. In cross section most of the celts are more or less flattened ellipses. A very few low ridges are formed by low bevels from the sides toward the center of the face, from near the poll to just above the bit, on one or both sides.

The materials of which the celts are made vary. Most of those of jade are of pale bluish-gray-colored stone, some mottled, and some even in color. Other bluish and greenish stones were also used. The serpentine celts are consistently larger, and in many instances more crudely made than those of jade.

Of the several hundred celts (including both those of jade and those of serpentine) found in the two seasons, only four were decorated. One of the most striking was a small specimen found in 1943, on which a stylized Jaguar-monster face in full view had been engraved. The design is at the bit end, meant to be seen with the bit turned up (pl. 56, *left*). Heavy plumed brows cap horizontal sawed ellipses that form the eyes. A stubby wide nose is situated immediately above the thick rectangular lips. The mouth curves down at the outer corners in strong arcs. A border below the upper lip may represent a row of teeth, but the fangs usually shown in Jaguar-monster representations do not appear. The outline of the lower lip follows the curvature of the mouth. A notch is cut vertically in the middle of the head. Below, the head is set off by a wide horizontal line, the lower margin of which is tapered to round off into the surface of the poll end of the celt. An elliptical area under this line suggests a pendant worn about the neck. The decorated celts from the 1942 collections have much lighter lines grooved into them, and are much less modified. One of the designs vaguely suggests Zapotec glyph D, or a plant motif (?) (fig. 47, *b*); another has a very simi-

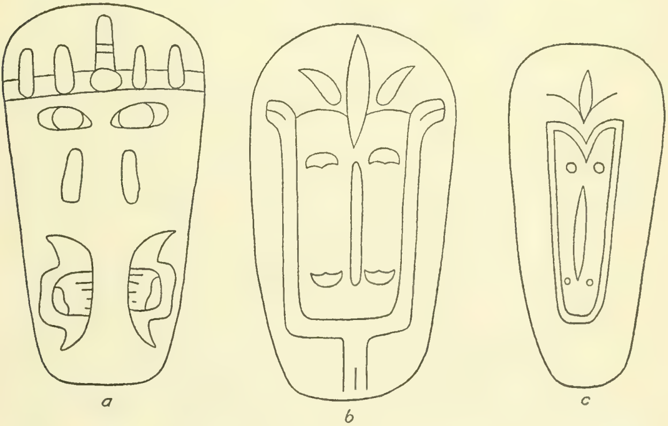

Figure 47.—Designs on decorated celts, cruciform cache of celts, Mound A–2. Shown with bits upward.

lar pattern (fig. 47, *c*). The last decorated celt (fig. 47, *a*) has a stylized face, possibly a Jaguar-monster (?) with a headdress and protruding fangs, below which are two eccentric flints (?) or knuckle-dusterlike objects seen on a few other carvings referable to Olmec art, for example, on one of the stone monuments at San Lorenzo Tenochtitlán.

BEADS

A variety of bead types were found at La Venta. The two basic forms are the subspherical and the cylindrical. The most common type is the plain subspherical, which is of course quite abundant throughout Mesoamerica. As Kidder has pointed out, as a rule these beads are not of the best quality jade; the La Venta series runs true to type in this respect, for the subspherical beads are consistently of dull grayish-green to yellowish-green stone, both solid color and mottled, usually markedly crystalline in structure, quite inferior, by modern standards at least, to that used for other objects. They range in maximum diameter from 0.8 to 1.9 cm., and are rather squat in form, being flattened at the poles. A few specimens approach, but never quite attain a true spherical shape. The perforations are most often biconical, tapering rather abruptly from a wide outer edge to a small hole just under 2 mm. across. A few of these beads have conical perforations which are quite wide at one end and taper at about the same rate as the shorter biconical ones. I did not note any of these plain subspherical forms with cylindrical perforations, although it is possible that there may be a few such. Most of the pieces of this type from Complex A came from the Stone Cist (64 were found there). A half dozen, and a few battered fragments that may have been reworked bits of cylindrical beads were found in the general digging in Mound A-2. The largest lot was a group of 99 found by Stirling in 1941 in clearing Altar 4; with them was a small subspherical bead of amethyst with a biconical perforation slightly off center.

From the Stone Cist came a modification of the plain subspherical type in which from four to eight lines were cut vertically in the sides of subspherical beads in opposite pairs (forming two to four circumferential lines intersecting at the poles). The amount of cutting varies from examples with wide shallow grooves to deeply cut pieces in which the grooves are larger than the lands between them, giving the beads a lobed or gadrooned effect. Thirty-eight beads have four grooves (and lobes), six have six, and two have eight grooves. There is in addition one bead in which the reverse effect has been given, by cutting five (?) wide ellipses to uniform depth, leaving the same number of slender raised bands running from pole to pole. These gadrooned beads were not found in any other lot excavated. Very similar pieces occurred, though they were rare, at Kaminaljuyú (Kidder, Jennings, and Shook, 1946, figs. 151, *b*, *c;* 152, *e*: 14, 18).

From the same Stone Cist came five subspherical beads with double biconical perforations whose axes lay approximately at right angles. They were found in a small strand that suggested in its length a bracelet or anklet, alternated with nine gadrooned beads (pl. 52).

Of the various types of cylindrical beads, plain cylinders are the most abundant. In the lot of materials from the Tomb only two beads of this type were found, one a cylinder 3.3 cm. long by 0.6 cm. diameter that was partly cut through, as though to make a pair of short cylinders, and a short cylinder 1.2 cm. in length. In the mound fill about the Tomb were three short cylinders, under 1 cm. in length, which are the intermediate between cylindrical and discoidal forms. The 1943 series however includes 12 (?) plain cylindrical beads. Several of these are obvious pairs matching both in size and in color, perhaps having been cut from the same piece of stone. The perforations, along the long axes, are slender tubes. I failed to note whether they were drilled from one or from both ends. No implements have been found at the site with which such delicate drilling could be done. Perhaps long thin drills were made of some perishable material, such as bone or hard wood, used with a cutting dust. Size varies considerably. My measurements are made from photographs and therefore not very accurate but indicate the range: From about 1.5 cm. long by 0.5 cm. in diameter to a bead approximately 6 cm. long with a diameter of nearly 1.3 cm.

Of the modified cylindrical types, the most numerous is one in which one or more concave-sided nodes have been carved from the original cylindrical form. The result is a shape that suggests a section of bamboo stem. The best example is a specimen from the Tomb with an overall length of 4.25 cm. in which three nodes have been carved. The "joints" are accentuated by circumferential grooves (pl. 57 A, *a*). Some other examples show less pronounced joints, or lack the circumferential grooves. One pair from the Tomb have complete nodes at their centers, and at either end short sections of slightly smaller diameter (pl. 57 A, *b*-*c*). Two or three similar specimens were found in the Stone Cist in 1943.

A similar variant of the cylindrical form is one grooved into a series of short convex-sided segments that look as though it were intended to cut the bead into a number of subspherical pieces (pl. 57 A, *g*). That such was not the intention is shown by the fact that the piece is perforated like other cylindrical forms, while the subspherical beads were most often if not invariably drilled after being cut to length. The finish of the specimen indicates it is a finished piece. Two short lengths of the same type were also found in the Tomb.

Two beads, a matched pair, were found in 1943 in which the cylindrical form had been modified realistically into representations of the heads of what appear to be crested ducks. No other specimens carved into representative forms were found (pl. 57 A, *p*, *q*).

The final type of bead is represented by a few examples of poor quality jade from the fill of Mound A–2, which are discoidal or nearly so in form. In some of them the two flat faces are not quite parallel, and the outline is only approximately circular. To judge by the absence of this type in the Tomb and caches, it was apparently not very highly regarded.

No specimens of the "subcylindrical" or barrel shape were found during the excavations, but such beads do occur at La Venta, for I observed several in the possession of the local inhabitants that had been picked up in farming operations. Those I saw were all of dull-colored crystalline jade of poor quality.

Little can be said about the uses to which the various bead types were put. To judge by the figures on the monuments, the subspherical type and its modifications were probably used for necklaces, bracelets and perhaps anklets. The fact that several pairs of cylindrical beads have been found associated with earplugs suggests that they may have been parts of these assemblies. However, no earplugs were found in the Tomb from which came a number of very fine cylindrical (bamboolike) examples, so there may have been various ways of wearing these objects.

Our information on the distributions of Mesoamerican bead types is still too imperfect to yield conclusions of significance; in fact, it is probable that new types may be defined whose distributions will prove to be more significant than those of any of those described here. However, it is of interest to note the apparent absence of a number of forms represented elsewhere, in addition to the similarities (as of the gadrooned beads) already remarked on. Subspherical beads with "double-well" perforation (Kidder, Jennings, and Shook, 1946, fig. 46, *d–f*), and elaborately carved beads (ibid., fig. 148, *d*), were absent, as were the following variants of cylindrical beads: "ringed," spirally grooved, and flared end (ibid., p. 113). Beads of irregular shape (unworked save for drilling and polishing), and long irregular elaborately carved beads are also absent.

OBJECTS OF UNKNOWN USE

A matched pair of objects of unknown use, with central perforations and channeled patterns, were found in the Tomb (pl. 54, *a*). They are of dark green jade, thick, nearly rectangular in form, with rounded corners, and a large perforation at the center. The back sides are plain, and slightly convex, the edges are squared. The front or outer faces have narrow raised borders on the two longest sides. The area within the borders is slightly concave, and on it in each piece is incised a head, in profile, of a monstrous Eagle-jaguar, with branched eyebrows and angular split fangs and a long down-turned beak. A ring around the central perforation, and the perforation itself, form the eye.

Also from the Tomb came a small flat specimen whose outline suggests that it was meant to represent either a heart or a leaf (pl. 57 A, *r*). It is of pale blue-green color. If it is a heart, it is of especial interest in suggesting the existence at La Venta of the ceremonial complex involving sacrifice and offerings of hearts that is known to have been widespread in Middle America before the conquest.

Ceremonial perforators (*?*).—Stirling has suggested as a possible use for an object from the Stone Coffer that of a perforator for ceremonial ear or nose piercing, and the like, just as the real and the jade sting ray spine "pendants" may have been utilized (pl. 53, *right*, *d*). The object is of highly polished pale blue jade. At one end it has a long slender tapered point, round in cross section. At its base, the point emerges from a thicker "handle" which is tapered off to a broad spatulate point at the other end (pl. 53, *right*, *a*). In the Tomb was found a specimen which originally may have been destined for similar use but later modified (pl. 53, *right*, *b*). It is of dark grayish-blue jade. The shape is reminiscent of that of a heavy modern awl or chisel handle. The cross section is square with well-rounded corners. One side is flattened off more than the others. The butt end is rounded off at edges and corners. At the other end the object tapers to a short truncated conical shank, from which protrudes a thin cylindrical stem. The stem terminates in a flat polished tip, not in a point, but perhaps this grinding off occurred after the original manufacture.

A smaller example, like that just described, blunt-tipped, possibly broken off and the tip ground off, was found in 1943 (pl. 53, *right*, *c*). Its form, though differing slightly from those above, also suggests a handle of some sort. It tapers from the rounded butt to the slender ground-off tip.

Incised obsidian core.—A piece of particular interest is the obsidian core on which is incised a design remarkable for its precision on the irregularly shaped refractory medium (fig. 48). The figure is that of a crested raptorial bird, perhaps a harpy eagle, or perhaps it is the Bird-monster motif. The eye is represented by a rectangle with rounded corners, within which is a cross. A pair of short curved lines at the inner edge of the beak may represent fangs. Beak, wings, and one leg are drawn in a boldly impressionistic manner. On the breast is an eye, a small round-cornered rectangle, and an unidentified

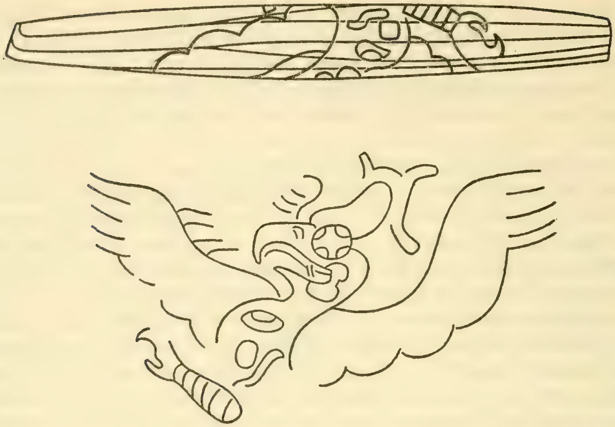

FIGURE 48.—Incised obsidian core, and Bird-monster design from it.

bent form. The bird seems to have been captured in the moment of striking its quarry. Of all the representations of eagles and the like in Mesoamerican art, I know of none that can compare with this for forcefulness. The drawing is surer, less scratchy, and superior in every respect to that of the incised cores from Uaxactun and Tikal (Kidder, 1947, pp. 21 ff).

Parts of mosaic ornaments (*?*).—A number of small objects are included here on the grounds that since they are thin, with flat backs, and have no perforations for suspension, they may have been intended to be inlaid in depressions cut to receive them or attached to the surface of some perishable base with gum to form mosaics. One pair of objects of this kind represent a right and a left hand and forearm (pl. 54, *b*). The hands, fingers together, thumbs alongside the hands, are shown bent at an almost impossible angle from the line of the forearms. The outline of the hands is correctly shown, with the middle fingers longer and the rest in proportion. The line between thumb and forefinger, and that between the fore and middle finger, are continued up the backs of the hands to the wrist by grooves. Nails are shown only on the thumbs. The decorated sides of the objects are convexly rounded, the backs are flat and plain.

Other objects also found with the Tomb materials in 1942 that may have been used in mosaics are two small flat semilunar pieces of jade and three flat ellipses of polished obsidian with slightly beveled edges.

Spangles.—A great quantity of minute bits of jade, each of which has two or more perforations, was found in the Stone Cist in 1943 (pl. 58). I do not know the precise number of these bits: I very carefully laid them out with a scale for photographing during a visit to the Museo Nacional, intending to count them at my leisure, but the parallax in the sight of an unfamiliar camera crept upon me, so that I chopped off a couple of the top rows. The pieces range in length from 1 to a little more than 2 cm.; the smaller ones are slim rods less than 2 mm. in diameter, with slight bulges to allow for the rims of the perforations. Those slightly larger are about 2 mm. in thickness, with several holes drilled in their flat sides, and some reach a width of 8 or 9 mm. They are extremely varied in shape, a few, with bulges at one end, suggesting stylized duck heads in form. None, however, are very certainly representative. The two commonest forms are the "duck head" type—slim, rodlike forms with a round bulge at one end, and a large type consisting of an ellipse, or half ellipse, with a tab, usually rounded, on one side. The perforations are small, made with some sort of very delicate drills. Both conical and biconical perforations occur, often on the same specimen. All the pieces have a very high polish on one face and around the edges; and the small rodlike ones are polished all over.

The purpose these pieces could have served is unknown, but they look as though they were meant to be sewed onto some sort of backing, perhaps of cloth or hide. The fact that they have at least two, and often more, holes indicates they were not meant to be suspended like tiny pendants, but were caught fast to the backing. No pattern could be made out in situ, but Wedel informs me they were found during a rainy period, and could not be exposed in the sticky clay in which they lay.

A good many of the spangles were made of bits of clear transparent green jade, although some are of material of poorer quality. Their manufacture must have been difficult, for some of them are so small that grasping them for grinding and polishing could not have been simple, and drilling them, without a vice, even less so. It seems possible that they were made by cutting a thin sheet of jade, drilling it at various points, polishing it all over, then cutting it into small strips laid out to include two or more holes each. After cutting off each strip, the edge of the "sheet" could have been polished. In that way only the edge cut to detach each piece would have to be worked down smooth after the tiny bit was separated. At least, that is the way I would try to make the spangles; whether the Olmec benefited by this labor-saving procedure cannot be determined until we find some unfinished examples of the objects.[21]

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[21] The small "plaquette" from Stratitrench 3 suggests such a procedure, but since the sawed lines pass through the perforations, it could not have been made into spangles without some additional drilling (fig. 44).

MANUFACTURING TECHNIQUES

The well-finished specimens make analysis of manufacturing techniques more difficult than it would be had we a few workshop finds with broken and discarded pieces in various stages of completion. We have no clue as to how the polishing was done, so that all the surfaces—depressions as well as convexities—were given their high sheen. Sawing was certainly an important part of the initial shaping process. Heads, arms, and legs were blocked out by this means. The ends of many of the cuts curve upward rather than downward, indicating that the saws used were probably of some hard stone, and that the thong and sand method was not used. The implements must have been small, but well mounted and easy to control, for the faces were in part blocked out by sawing, as for example the lines running from the sides of the nose to the lower corners of the mouth. Incising was used in several ways. One variety is that used to accentuate planes, as for example, the outlining about the features of the female figurine from the Tomb, or to indicate hair, articles of dress, and the like. In many cases it is difficult to determine if such lines were sawed in or incised, and perhaps the difference is partly artificial. At any rate, most of this incising consists of rather shallow grooves cut in prior to the polishing of the specimens, and evened off quite smoothly. Another variety of incising was that done subsequent to the final polishing, so that the lines have a sharp rough appearance. In the case of the La Venta specimens, this occurs only on the decorated ear spools, pendants, celts, obsidian core, and the like, but many of the stray figurines of Olmec type in museum collections are thus touched up, often with highly stylized profiles like those on the large ear spools. In the more typical pieces, such incised additions are rather sparingly applied. Drilling was another frequently used process. No identifiable drills have been found, but it seems clear they were small and of some hard material, and were not like the hollow tubular drills that seem to have been so characteristic of highland Guatemala and Oaxacan jade carving. It seems likely that drilling was used to lay out features on the figurine blanks. One or more holes were drilled at the eyes, for each nostril, to mark the corners of the mouth, and in one instance along the line separating the arms from the body of the figurine. These drilled pits would thus establish the spacing of the features, and perhaps facilitate the sawing. To judge by their invariable occurrence at the points mentioned, these pits must have been an indispensable part of the manufacturing technique. The eye depressions seem to have been made especially deep, presumably to accommodate the inlaid eyes.

THE STONE MONUMENTS

Thanks to Stirling's detailed account of the La Venta monuments (Stirling, 1943 a; also Stirling, 1941), it is not necessary to describe those found up to and including the 1942 season. In the comparative section following, the same nomenclature he has established is used. To facilitate comparisons of detail, the various figures of each monument will be designated by a series of numbers, the central figure (that in most prominent relief) being numbered "1" and the others in sequence, proceeding clockwise. For example, in the case of Stela 2, the central figure will be referred to as Stela 2: 1, the small figures surrounding him from 2 to 7 beginning with the one in the (observer's) lower left-hand corner and proceeding in a clockwise direction (fig. 49). The figures of Stela 3 have been similarly numbered: 1 is the aquiline-featured main personage on the lower right, the figure with the elaborate headdress facing him is Figure 2. The lesser figures are numbered from 3 to 8, proceeding clockwise again, with the nearly obliterated small figure in the center who carried what appears to be an obsidian-edged club, being 9 (fig. 50). The figures on the altars (figs. 51, 52) are similarly numbered. The main personage is 1, the next, in a clockwise direction (as viewed from above), being numbered 2. A modification has to be adopted for Altar 5, where 1 is the main personage on the front, 2 is the infant whom he holds in his arms, and figures 3 to 10 are those proceeding clockwise about the stone (fig. 52).

In the 1943 season several additional carved stones were found, and the following year Stirling found and examined a number of monuments that had been carted off from the site in years past, during a period in which the island and neighboring forested areas were being cut over for mahogany. He has described some of these stones (Stirling, 1943 a), but to enable me to make more complete comparisons, has made his notes and photographs available to me. They will be described briefly in the present section.

The following numbers are applied to them. Monuments 8 and 9 are the two figures at present in Villahermosa and Comalcalco. Monuments 10 and 11 are those situated at the ruins of Finca San Vicente. Stirling ascertained that all these four came originally from the La Venta region, and he and I both suspect that they may quite well have come from Complex A; some of them at least certainly did, on the basis of local reports. Monument 12 is the monkey figure from the main trench across A–1 dug in 1943. Monument 13 is the short block of stone with a figure carved on its flap top, from farther north in the same excavation, and Monument 14 is the cylinder perforated along its

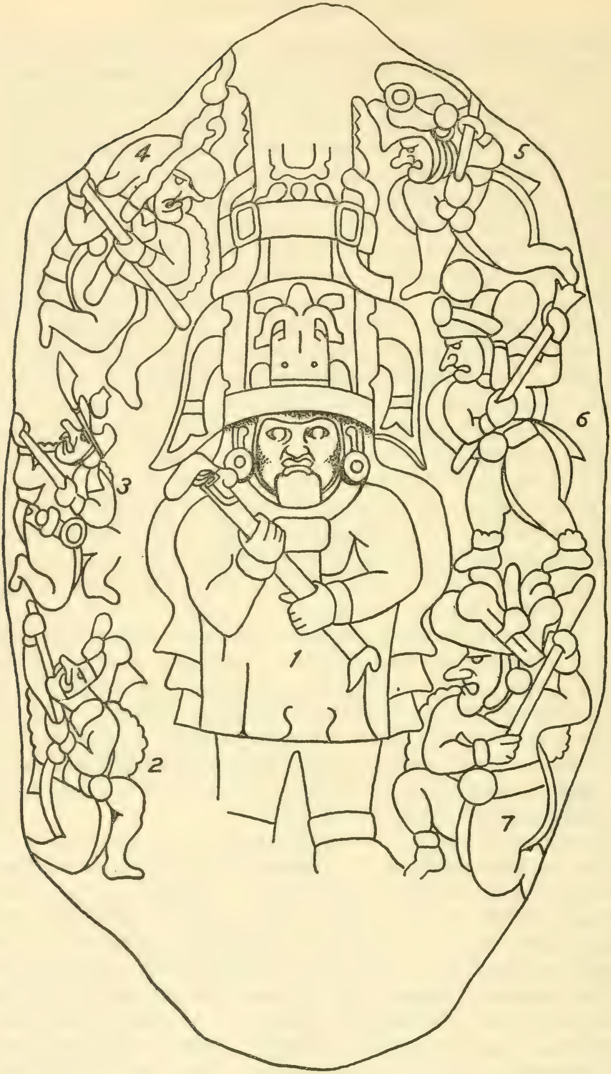


Figure 49.—Stela 2, showing detail of principal figure, and nomenclature of minor figures.

long axis with a plug at one end. Monument 15 consists of two fragments (it is possible that they are the remnants of two different objects) also from the cross trench. Altar 7 is the designation for the battered but once very elaborate altar found in 1943 in the area between Complexes A and B. The numbers 16, 17, and 18 are reserved for the massive sandstone blocks at the southern end of the Central Group at La Venta.

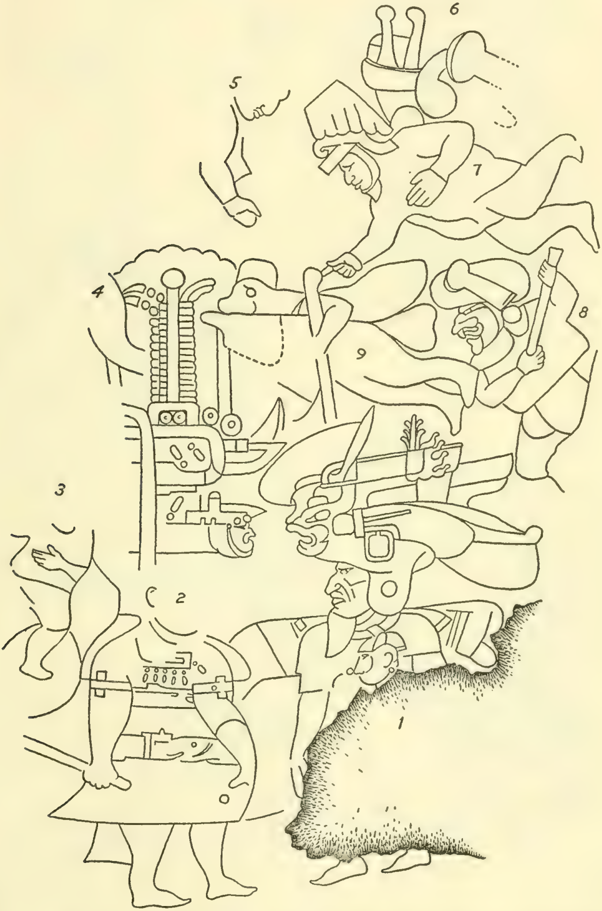


Figure 50.—Stela 3, showing features of principal figures, and nomenclature of minor figures.

Brief descriptions of the above newly discovered stone carvings and of the detail of the Stone Coffer (designated by Stirling as Monument 6) follow.

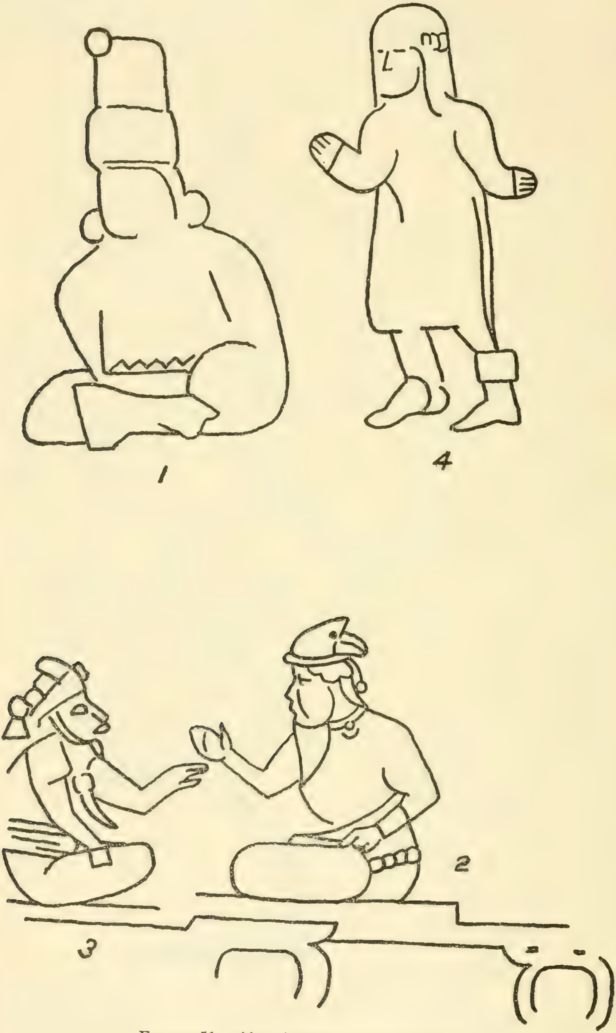
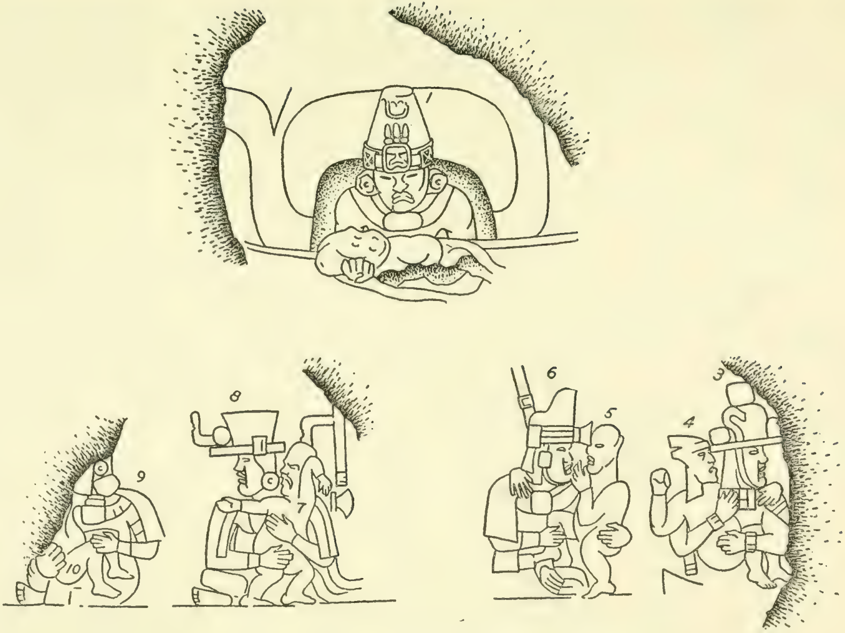


Figure 51.—Altar 3, showing nomenclature.


1
2
3
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6
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9
10

Figure 52.—Altar 5, showing nomenclature of figures.

Monument 6, the Stone Coffer found just south of the Tomb in Mound A–2, has at its north end a carving in low relief representing the face of a monstrous jaguar, modified to the rectangular form of the end of the coffer (pl. 2, *left*). The eyes are indicated by two long narrow rectangles with rounded corners which slope downward slightly toward the center. The jutting brows above them each have three angular projections along their upper side, becoming thus the typical "branched eyebrows" of the art style. Above them, sweeping back over the frontal regions, are curving appendages, probably plumes. In the center of the forehead is a deep notch, in this case formed by a drilled pit with rounded-off edges. This feature, reminiscent of the notched heads of the ax figures described by Saville (Saville, 1929), is probably a realistic device to indicate the shallow V-shaped depression formed by the heavy nearly converging supraorbital ridges of the jaguar. The nose is low and broad, and directly over the upper edge of the mouth. A broad flat band, essentially a rectangle with a projection on its upper side, represents the latter feature. Fangs are indicated by an S-shaped device on either side. It is probable that the lower (distal) ends of the fangs were forked, originally, but the carving is too eroded to permit certainty on this point. There appears to be a long nose ornament hanging over the mouth. A forked tongue protrudes from the mouth and hangs below the lower lip. Under the eyes are the remnants of some rather obscure decorative elements that may be extensions of the decoration of the sides. Horizontal ribbonlike bands run from the sides around the corners of the box and under the mouth, as though to tie the mask on.

On either side of the box ribbonlike bands continue back at the level of the eyebrows, branching off at five places into a two-lobed ornament that suggests the jaguar's forked tongue, or a motif derived from the animal's nose and mouth (fig. 60, *s;* pl. 2, *left*). On the east side, the better preserved, can be traced the remnants of a forepaw with three long claws and a bracelet, and farther back a pair of strongly curved lines that probably defined the hindquarters.

Of the four small statues which were reported as having been removed from La Venta, one, Monument 8, is in the Plaza de Armas of Villahermosa (pl. 59, *left*). It represents a seated human figure, leaning forward, his hands grasping his crossed legs. He wears a headdress with the tip folded over frontwards, perhaps a version of that of the principal figure of Altar 5. The face is broad and heavy. The wide flat nose is directly above the everted lips. The eyes are of a peculiar form, circular on their inner sides, rectangular on the outer. The ears are narrow angular ridges along the head. The body is very simply formed.

Another of the transported figures (Monument 9) has been built into a display case in the school at Comalcalco, where it was brought from La Venta via San Vicente (pl. 60, *left*). It also portrays a man seated cross-legged, but with his hands at his sides, resting loosely on the ground, instead of grasping his knees. The face is badly eroded, so little can be said of the features. The general proportions of the head and face seem fairly typical, the face being of equal width down to the angle of the jaws.

Two other figures were found at the ruins of Finca San Vicente (pls. 60, *right*, and 61). (There was a third, Stirling informs me, but it is smashed beyond hope of salvage.) Monument 10 is a small seated personage, shown in the posture of the statue in the Plaza de Armas, cross-legged, his hands on his lower legs. He wears a thick head band, and his head is low and rounded. The features are eroded, but the wide nose and thick upper lip can still be distinguished. He appears to have worn a rather genial expression. A design, possibly a glyph, was incised on his belly. With him is, Monument 11, a seated figure of about the same size. The battered body is that of an animal, probably the Jaguar-monster. The right hind leg is doubled back in manlike, not animallike, posture, so claws and pads point upward. A wide tail that branches symmetrically into four square-ended plumes is carved in relief on the back. The head, sharply tilted back, is a sort of keystone shape, wider across the top. Strong ridges run across above the eyes, apparently representing brow ridges. Above them, in low relief, are brows with three blunt plumes. Apparently a wide mouth opened directly below the broad stumpy nose, and fangs (and perhaps tongue?) protruded from the upper jaw. No upper lip can be seen; perhaps it has been battered off. On either side of the fangs are deep pits representing the sides of the mouth. The line of the lower lip arches upward in the center. The photograph shows some faint lines zigzagging down the forehead, which may be incised, or may be cracks. Despite the battered condition, the monument clearly represents an aspect of the Jaguar-monster.

Monument 12 is the carving of a monkeylike figure of a light green schist (?) from the main trench across A–1. The creature has his arms raised up over his head in an attitude suggesting that he is bound, hung up by the thumbs, so to speak, although no ropes are visible. A tail, also in low relief, curls up the back of the stone to the hands. The arms are in low relief, and, unusual in the general art pattern, are bent backward at an anatomically impossible angle. Presumably this feature was enforced by the size of the stone selected. The head is elongated, bulging somewhat in the frontal region; the eyes are represented by shallow concave disks surmounted by branching brows similar to those on the Jaguar-monster mask. Two narrow bands slant diagonally across the forehead. The broad flat nose lies directly about the protruding arched upper lip. The lips do not show the usual everted character; it is possible that some sort of a mask lies over the mouth, outlined by shallow incising. The ears are long, with pendulous lobes. They seem to be pierced but no earplugs are shown. The figure wears a broad collar or necklace, and a wide belt, both of which bear incised designs. On the right and left corners of the necklace are long pendants with a flaring bifurcated tip that resembles the split tongue of the Jaguar-monster on the Stone Coffer. The design on the belt is partly defaced, but appears to have been a Jaguar-monster mask with plumed eyebrows (?), small rectangular eyes, an angular open mouth with a row of short triangular incisors, and protruding below the lower margin, long curved bifurcated fangs (pl. 62, fig. 53). The base of the monkey figure is broken off, but enough remains of the right leg to indicate that the lower limbs were probably much simplified.

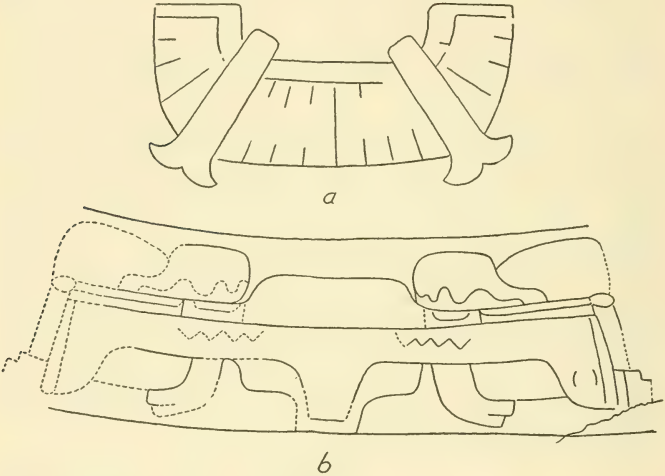


FIGURE 53.—Incised ornaments from Monument 12, partly restored. *a*, Necklace. *b* "Belt." (Dotted lines of belt are reconstructions not clearly visible in available photography.)

Monument 13 can best be described as a short block, or columnar drum, of basalt (pl. 63, fig. 61). In cross section it has four not quite regular sides with heavily rounded corners—it looks as though it might have been a section of a large natural column with the normal five sides dressed down into four. One transverse face, about 0.8 m. across, has been carefully smoothed, and on it a human figure and several glyphlike elements have been carved in very low relief. Despite the flatness of the carving, it gives clear evidence of the transfer of concepts of perspective gained from work in the round and in high relief. The personage is shown striding, or posturing as in a dance, to the (observer's) right, with head tipped back so that he gazes fixedly at a banner (?) in his thrust-out left hand. The face is in profile, and, although much of the detail of eyes and mouth have been obliterated by pits (of mud-wasp nests?), the heavy arched nose with flaring alae and the prominent chin and massive jaw are clearly seen. The shoulders are in three-quarters view, the left thrust forward in keeping with the pose with out-thrust arm. The underline of the jaw conceals part of the shoulder, and the neckline is indicated by a snug string of beads in an excellent handling of perspective that gives depth to the figure and defines the viewer's position as slightly above the figure. The right shoulder droops slightly, being joined to the neck by a convex line marking the upper margin of the trapezius that realistically suggests powerful musculature. About the head is a turbanlike affair, given a clothlike texture by light crosshatching, from which rises a curled bunch of plumes, and behind which falls a long trailer, the inner edge of which passes behind the shoulder—again a deft touch that gives perspective to the carving. The right arm is flexed so that the partly open hand is in front of the right breast. There is a wristlet of some sort marked by three or four parallel lines. About his waist the personage wears a wide belt, supporting a breechclout. The two ends fall behind, and lightly incised lines over the inside of the left thigh suggest a pendant from the front. The legs are simply shown, with realistic sweeping curves marking the lines of thighs and calves. The feet are apart, the knees slightly bent. On the feet are sandals with high heel guards and elaborate ties over the instep, similar to those shown on certain Mayan stelae. From the point of view of draftsmanship, the figure is very well done, on the whole. In addition to the treatment of neck and shoulders, and the realistic curves of thigh muscles, the convexities indicating the deltoids and the slight curve of the pectoral muscle on the left side should be noted as points of realism. The chief defect is that the face is disproportionately large for the figure (unless it is supposed to be wearing a mask), and the right arm is too short, throwing the upper part of the figure out of balance. In other respects the figure is most successfully handled for a carving in such low relief. The tilt of the head, the asymmetric depiction of the shoulders (with the left thrust forward to hold out the bannerlike object) and the slightly bent knees give the figure a powerful feeling of movement.

Behind the figure, toes sloping down toward it, is a conventionalized footprint, conceivably meant as an obvious ideograph. Under the banner are three glyphlike forms, the uppermost, a blunt ellipse, that seems to have traces of a double-curve band across the upper right corner; the second, a similar ellipse surmounted by a bifurcated form (the bifurcated Jaguar-monster tongue again?); and at the bottom a bird's head with heavily hooked beak, an incised circle representing the eye (partly obscured by the pit just behind it), and traces of a vertical band just behind the eye from the top of the head down. It seems possible that these forms once had more lightly incised detail within them.

Monument 14 is a cylinder of stone with a cylindrical perforation through its long axis. It has no decoration, or at least, none remains on it. When found, one end of the perforation was neatly plugged with a stone disk.

Monument 15, as has been remarked, consists of two fragments, which may or may not come from the same piece. Both are flat plaques with smoothly dressed upper faces carved with flat designs (pl. 64). One, the larger fragment, has a short stumpy foot at the corner. On its face it has what may be elements of a headdress of plumes or possibly a stylized Jaguar-monster pattern: there is a comma-shaped element at one corner of a hollow rectangle from which depends a keystone-shaped form, and what may be a matching comma-shaped element on the other side, perhaps representing the protruding fangs and tongue. A small elliptical depression appears to have been centered over the hollow rectangle. The decorative field is framed in a narrow border. The other piece, framed by a band of similar width, carries part of a more realistic theme, very obviously the Jaguar-monster, with an open mouth depressed at the corner(s) below a realistic muzzle. The large L-shaped element beside the mouth may be the conventionalized curved fang added as an ornament. It may well be that the two fragments belong together, for they are of the same type of material and of nearly the same thickness, the borders are the same in width, the background is cut away to about the same depth, and, although this estimate is open to error, reconstruction of the missing halves of both leaves them not too far different in width, so that they might have come from the two ends of the same altar top, or plaque, or whatever the object might have been. A possible reconstruction is shown in figure 54.

Altar 7, the last of the newly discovered monuments, is unfortunately very heavily damaged. It once must have been one of the most elaborate "altars" at the site (pl. 65). To judge by the photographs, damage consists chiefly in spalling off of long thin sheets of stone from the surface, as though from repeated exposure to fire. Figure 1 consists in a large face recessed in a niche with rounded top, similar to those of the other altars. Most of the features are obliterated, but the general facial proportions are plainly those of other full-face figures from the monuments: broad, with heavy squarish jowls. The ears are long and narrow, and from them depend ornaments. From the region of

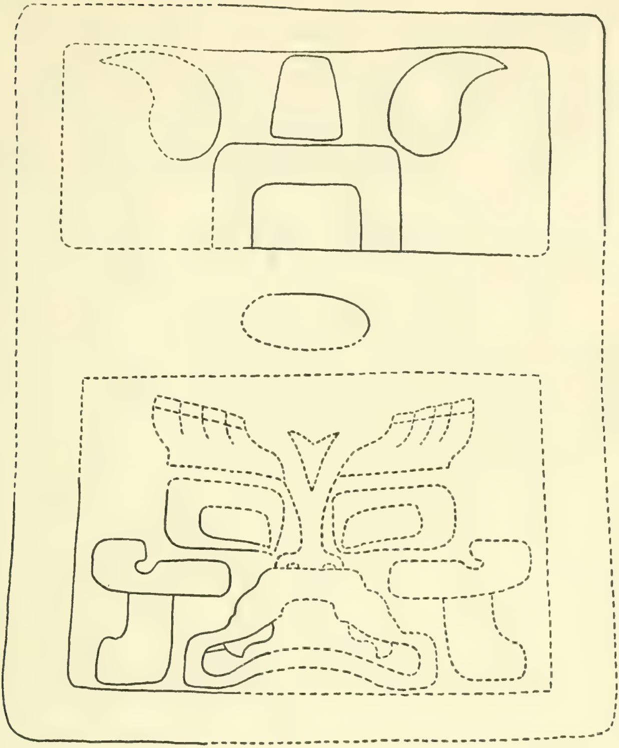


FIGURE 54.—Suggested reconstruction of Monument 15 fragments (see pl. 64).

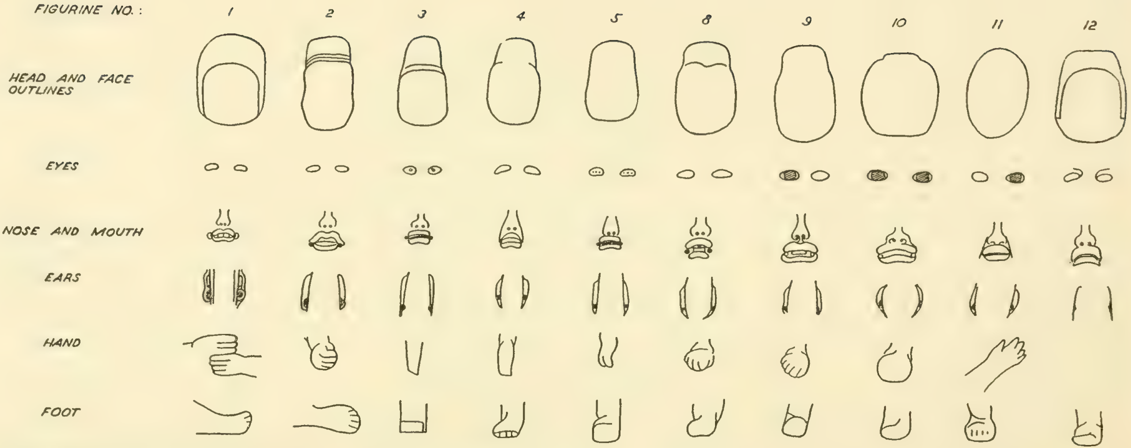
the mouth and chin depends a peculiar spade-shaped object, too battered to recognize with certainty. It might have represented a beard (it is very similar to that of Figure 1, Stela 2), or, as Stirling has suggested, some sort of mask for the lower part of the face similar to that adorning the Tuxtla statuette. Above Figure 1, slightly to left of center on what seems to be a natural ledge or projection, are traces of what may have been a large glyph, perhaps a round-cornered rectangle enclosing an X-shaped element. One would expect a companion piece to the (observer's) right. Of Figure 2, in low relief just to the left, only the upper portion remains. A man is shown as standing with face in profile and shoulders in three-quarters view, his right hand bent to waist level, apparently clutching some object, his left flexed and pointing upward over the top of Figure 1. His face has been obliterated, but a mitrelike cap can be seen, and he sports what looks suspiciously like a false beard, or else one trimmed to a narrow line along the edge of the jaw. He has ear ornaments of some type, and the remnants of a wide belt. Three small more or less round-cornered rectangular objects (glyphs?) appear to have emerged from his mouth, floating up toward the cartouche above Figure 1. Figure 3, around on the side of the altar, is a large head in bold relief that appears to represent a horned owl. It has large round eyes, bulging within shallow recesses, round puffy cheeks, and what seems to be a hooked beak extending downward from between the eyes. Two or three rodlike projections from either side seem to represent the "ear tufts." Figure 4 is immediately below Figure 3, and is in very low relief. I cannot make out whether it is actually the body of Figure 3, or is a separate unit representing a captive bird. There appear plainly enough a wing outstretched at the (observer's) right, and part of another to the left. The feathers are indicated at the wing tip to the right, by simply curving masses. Below are two obliterated features which may represent the bird's legs, outspread like those of the eagle in our national coat-of-arms, or which may be tail feathers. In one photograph the right-hand element looks as though it might be the head and beak of a bird seized by the legs. Figure 5 represents a man. His headdress seems to have a long projection that extends forward touching, or going behind, Figure 3. The face is shown in profile, but the features are so eroded that little can be said of them. His shoulders seem to be in full view, but whether he was faced toward or away from the observer cannot be made out. Traces of feet and legs can just be made out. He may have been standing grasping the bird figure, Figure 4. Figure 6 is another large head in bold relief. Stirling considers it another owl head, and is probably right since he examined the altar itself. However, in one of the photographs that seems to show it clearly, the ears appear to be round tabs (rather than tufts as on Figure 3), the eyes are smaller and slightly more bulged than those of Figure 3, and there appears to be a round buttonlike nose rather than a beak, so that in this view at least it suggests a kinkajou head rather than an owl. As far as subject matter goes, a figure of the nocturnal kinkajou would not be a bad companion for the owls, if creatures or spirits of the night were meant to be portrayed. The remainder of the altar is very badly damaged. There is another large owl head, apparently similar to Figure 3, and at least two pairs of unshod human feet, and several fragments that seem to be wing tips and talons of large bird figures. It should be noted that this altar differs from most of the others in that the block from which it was carved was not squared up all over. The figures would seem to have been begun at the natural surface, and possibly protuberances and irregularities were utilized for some of them at least.

STYLISTIC CHARACTERS OF THE SCULPTURES

In view of the association of the small jade carvings and the stone monuments with what appears to be a one-horizon site, it seems reasonable to assume that they are not only contemporaneous but made by the same people. It is theoretically possible for two strains of art, originally unrelated, to coexist in the same culture particularly if this culture has been subject to varied alien influences. Such a situation expectably would result in a hybrid aspect of the art, with stylistic differences conforming to the different complexes of media and techniques. Of course, if, as seems to be the case in the La Venta situation, all of the art expressions can be shown to be related, it does not mean that there have been no outside influences, but rather that the art style itself was dominant. Thus new traits and complexes, whether use of jade ornaments, or erection of stelae, would have been modified to admit the motifs and methods of representation deemed appropriate by the art style. The broader cultural implications of such a situation need not concern us for a moment, but it is important to note that if we can relate the carvings large and small artistically, we thereby widen our range of comparison with other cultures. If, that is to say, we can demonstrate that style transcended medium and details of sculpturing techniques at La Venta, we need not restrict comparisons to, let us say, small jade figurines and pendants in the form of jaguar teeth from other regions, but may legitimately compare, pointing out similarities and differences, stone monuments, stelae, and any other relief representations on which we have data in adjacent culture provinces. We shall begin with a discussion of the characteristics of representations of the human figure, first in the small jade figurines, and then in the monuments; next, jaguar representations; and finally a series of miscellaneous motifs and decorative elements.

REPRESENTATIONS OF THE HUMAN FORM

Front view.—The most significant stylistic features of the figurines appear in the series of line drawings of their component parts (fig. 55). In the upper row, the head-and-face outlines show a typically elongated head outline, apparently resulting from artificial deformation (which appears in many profile views). Also typical is the great bigonial width of the outlines, and the massiveness of the jaws. The typical head and face outline varies from that of an elongate rectangle with rounded corners to a slightly pyriform shape with maximum width at the base. Figurine 8 is the only one departing widely from this norm. Eye sockets are typically formed by deep-drilled pits, with a preference for blunt-ended elliptical outlines. Probably all were inlaid with materials of contrasting colors. Orientation of the eyes varies from straight to forms with a slight downslant at the outer


FIGURINE NO.:
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11
12
HEAD AND FACE OUTLINES
EYES
NOSE AND MOUTH
EARS
HAND
FOOT

Figure 55.—Figurines of jade and other stone, showing components of features. Numbers refer to sequential numbers of complete specimens in text. Specimens Nos. 2, 9, drawn from photographs slightly off from full front view, giving erroneous impression of asymmetry of outline. Ears of No. 10 not visible in front view; detail of hand (same specimen) not clear in photograph. Not to scale.

corners; only exceptionally are the inner corners lower. The form and relation of nose and mouth is of especial diagnostic significance. The nose tends to be broad with flaring alae. More significantly, there is little or no space between the lower portion of the nose and the thick membranous area of the upper lip, i. e., no, or almost no, integumental upper lip is depicted. This accentuates the impression of thickness and heaviness not only of the lips but of the face in general. The form of the mouth varies somewhat although invariably it droops slightly at the corners. The drilled pits at the corners increase this characteristic conformation. Ears are typically long and narrow, with angular outline. The invariable perforation in the lower portion either represents an ear plug, or was meant for the attachment of small ornaments. The total effect of the broad faces with heavy jowls, thick features, and full lips, seems to be an exaggeration or idealization of a particular physical type.

The bodies are in general treated with a simplified realism, that is, minor details are suppressed—the handling of hands and feet indicates this quite clearly—but there is an emphasis on structure and mass that suggests not only keen observation but accurate anatomical knowledge on the part of the artists. Arms and legs are not rubbery "boneless" appendages but are limbs with definite structure, that bend only at the joints. Gentle but definite bulges in the shoulder and chest areas, at the biceps, and upper forearms, and in thighs and calves, indicate musculature definitely and correctly. As a final character, we may note the absence of superfluous decoration. Aside from suggestions of garments, there are no purely ornamental details on any of the figurines.

Most of the features just listed as characteristics of the small figurines relate to front views of the human face and figure of the monumental carvings. It can be shown that all of them recur in most of the large La Venta monuments which show human beings in this position. Some of the variation is probably due to difference in material and size of the figures. Figure 56 presents the components of the figures of the monuments.

Elongated deformation of the head appears in but two cases: in Monument 8, and that of Stela 1, though even these have headdresses that partly obscure the head forms. Perhaps the lack of this feature in the case of the colossal heads represents a labor-saving device; there is only one case among the less grandiose figures that unquestionably shows a low unaltered head (Monument 5), for the other representations have elaborate headgear which serve to conceal their head forms. Wide faces with great bigonial breadth can be seen in every case. Its apparent absence in the main figures of Altars 4 and 5 is misleading, being due to the angle at which the monuments were

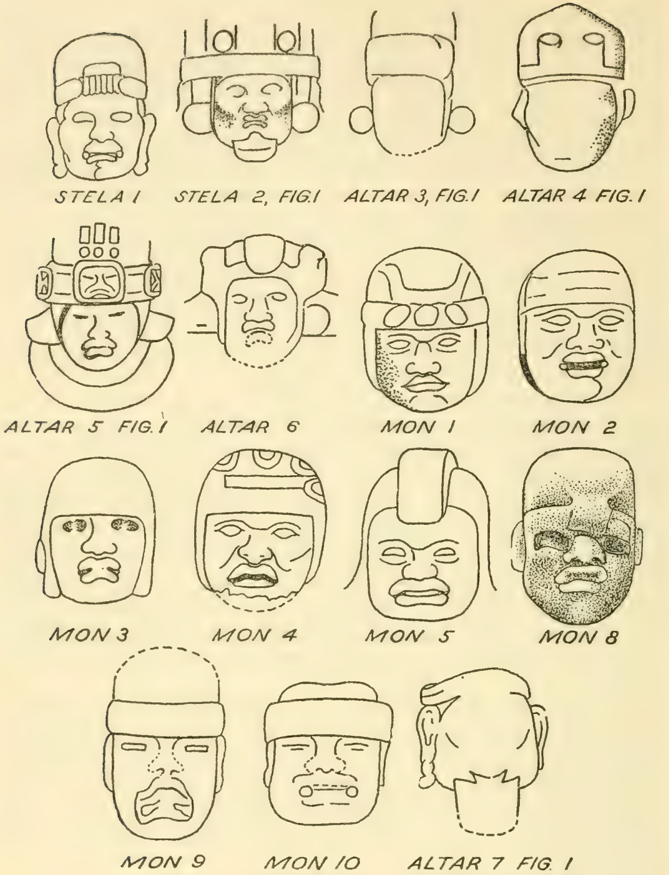
STELA 1
STELA 2, FIG.1
ALTAR 3, FIG.1
ALTAR 4 FIG.1
ALTAR 5 FIG.1
ALTAR 6
MON 1
MON 2
MON 3
MON 4
MON 5
MON 8
MON 9
MON 10
ALTAR 7 FIG. 1

Figure 56.—Monumental sculptures, human faces in front view (not to scale). Monument 9 reconstructed from photographs taken at angle.

photographed. Figure 1 of Altar 5 very plainly manifests this physiognomic peculiarity. Eyes of the large figures differ most from the forms pointed out as typical of the figurines. Only two have deep-drilled eyes (Monuments 5 and 8), and in one of these the outer ends of the eyes are modified into a nonhuman angularity. In the rest, the eyes tend to be horizontally placed ellipses symmetrically pointed at both ends and made by excavating the area to a level slightly below that of the eyelids. In the larger specimens particularly, the surfaces of the eyes are realistically convex. The fact that the eyes of the figurines were meant to hold inlays, while those of the large figures were not, accounts for the different modes of representation. The differing form of the ears appears to be a more arbitrary matter. On most of the larger figures, where shown at all (where not covered by appendages from the headgear) they are represented fairly realistically, but alongside the head, so that they are not visible in a direct front view. Only Monument 8 has the stylized long angular ears of the figurines, although those of the figure of Stela 1 approach this type. It is in the form of the mouth and nose that the large figures show the most uniformity to the type portrayed by the figurines. In every case in which erosion has left these facial parts discernable, the nose is broad, and situated directly above the thick membranous area of the upper lip, which curves strongly upward from the corners. The lower lip, also thick, repeats the direction of curvature. In a few cases there are pits at the corners of the mouth. Treatment of bodies varies, but there are several figures, those for example of Altars 4 and 5, and Monument 13, in which anatomical detail is simply but very realistically portrayed. Hands and feet are in every instance simplified. Sexual organs are not shown in any instance. The final characteristic, lack of superfluous decoration, holds good for all except the stelae, where the crowding of the various forms represented, and the more elaborate dress and headgear combine to give an effect rather different from that of the other specimens—small figures and monumental pieces alike. Apparently the normal pattern of chastity of decoration was in the case of stela art modified by a pattern calling for elaborate composition. Yet the recurrence of familiar modes of representation and motives in the stela carvings relate them without a doubt to the other monuments, and in turn, to the miniature art of the figurines.

Profile views of human features.—It is interesting to note what happens to the stylized human representations just defined when depicted in profile, that is, in low relief, or when drawn (incised) on a plain surface, as in the case of the profile faces on the decorated ear spools. A series of the best preserved of these profiles is presented in figure 57. It will be noted, that while they range from quite realistic representations, as in the case of most of the reliefs from the monuments, to extremely stylized applied-art forms (the designs from the ear spools), they retain a number of features in common, and also repeat noticeably certain of the traits characteristic of the full face and full-round views. Elongated deformed heads appear rarely because of the frequency of elaborate headdresses of one kind or another; such heads are however to be seen in the case

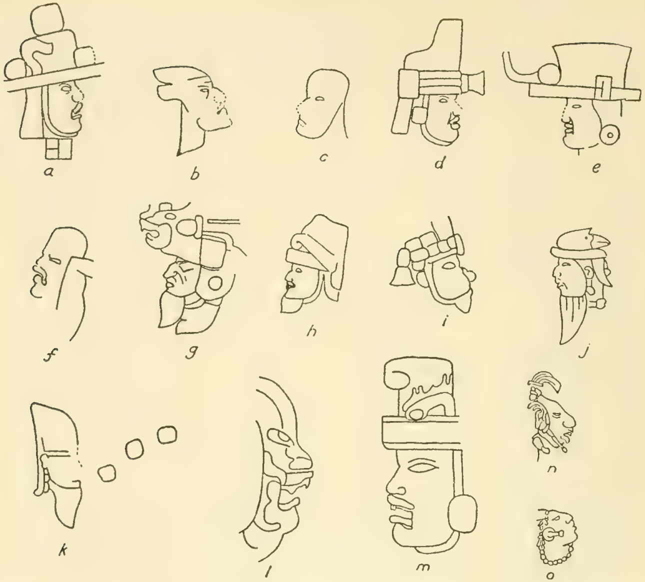

Figure 57.—Various human profiles (not to scale), showing typical portrayal of heavy jaws, thick everted lips, large noses, and some miscellaneous features, such as beards, ornaments. *a–f*, Figures 3–8, Altar 5. *g–h*, Figures 1, 7, Stela 3. *i, j*, Figures 3, 2, Altar 3. *k*, Figure 2, Altar 7. *l*, Stylized human profile from decorated earplugs. *m*, Face from engraved celt from Simojovel, Chiapas (for comparison with "l"). *n, o*, Two Mayan profiles for comparison (*n*, Yaxchilan, after Spinden, 1913, fig. 24; *o*, Yaxchilan, after Spinden, 1913, fig. 7).

of the "infants" of the Altar 5 reliefs (fig. 57, *b*, *c*, *f*) (incidentally, there are faint suggestions that the faces of these figures, which scarcely match the infantile bodies, are masks; note the faint but definite lines from the back of the head to the angle of the jaw in two cases). The other personages may or may not have had elongated heads. Great bigonial width cannot of course be shown in profile, but we may observe its counterpart: general massiveness of jaw and chin, in all the profiles. Eyes are shown in front, not side view, and are ordinarily long narrow ellipses. Mouths are ordinarily of the same type as that of the front views, with the thick membranous upper lip beginning directly below the nose. Prominent teeth are shown in several cases, those of the profile from the earplugs being exaggerated until they suggest the fangs of an animal. Upper and lower lips are separated at the corners of the mouth; they are never shown in a continuous U-shaped curve as was done in the art styles of some adjacent regions. Even in the case of the Figure 1 of Stela 3 (fig. 57, *g*), which at first glance seems to differ from all the rest, the form and position of the mouth are drawn according to the same pattern. Form of nose, as shown in the profile views, seems to differ from that of front view and full round carvings more than any other feature. (The amount of projection is often obscured in incised profiles (e. g., fig. 57, *l*, *m*) by the exaggerated protrusion of the lips. Careful examination shows, nonetheless, that the incised profiles also are equipped with very prominent noses.) In the profiles in which it is well enough preserved to be judged (fig. 57, *g*, *h*), noses are shown high and often strongly arched. Two facts suggest, however, that this difference is in the case of the full-round carvings merely a technically enforced variation: both full-round and profile noses are heavy, with thick broad alae; and second, faithful representation of such prominent noses in front views and in full-round would at least double the amount of material to be cut away over the rest of the face. What seem to be two distinct types of noses are therefore probably modifications, to save labor, of a single form.

Treatment of bodies and of hands and feet repeats the pattern of the full-round figures. Masses (bodies, arms, legs) are shown in the majority of cases in relief, with rounded edges, and modeled areas to indicate perspective. The important parts are thus in true relief, rather than in champlevé, or incising. In some of the figures the shoulders are shown twisted into a difficult full view, but true profile, and even three-quarters views of the shoulders occur. The structural masses of the bodies are simply but convincingly indicated. Realism appears in the differing bodily proportions of the adult figures from the infantile proportions, with their chubby bellies and short arms and legs, of the infant figures on Altar 5. Incidentally, normal adults are far more common among both small and large figures than are infants. The baby or dwarf theme in the art is considerably rarer than formerly supposed. Hands and feet are simplified but never distorted. Phallicism is entirely absent.

This brief comparison of the small figurines with the representations of human beings on the large monuments serves two ends. Not only does it bring out a number of arbitrary details which aid in the definition of this art style, but as well it relates the miniature with the monumental objects beyond any possible question. Despite the difference in materials and the differing technical problems involved, the objects are products of the selfsame art style, and could be shown to be such on the basis of treatment even if they had not been found associated with the same archeologic site.

To diverge for a moment from the problem of the art style itself, the skillful realism of the sculptures makes one wonder to what extent they are true reproductions of the physical type of the makers. The

Olmec facial proportions differ considerably from those glorified in Maya painting and carving (and which are still to be seen occasionally in the Maya area), but they do not seem to be of a type which has yet been isolated and defined in southern México. Nonetheless, as Covarrubias has pointed out, the pudgy mouth with depressed corners (although more normally situated in distance from the nose) is often to be seen, especially in children. Moreover, the modern observer can note approximations of the typical facial outline of the sculptures throughout southern México; in some cases the massive jaws with great bigonial width may be due to alien admixtures, but in other cases they occur in what appear to be purely Indian individuals. As a matter of fact, perhaps the best published examples of this facial conformation come from isolated groups of the Chiapas highlands south of the archeologic habitat of the Olmec (compare, for example, in Leche, Gould, and Tharp, 1944, figs. 13, 15, 21, 37, 53, 88; and in Gould, 1946, figs. 37, 74, 82). In individuals with this wide bigonial diameter and massive low jaw, other traits seen in Olmec carving very consistently occur: noses that are both high and broad, and thick lips. In other words, it is not necessary to postulate some exotic racial group as the models (and presumably also the makers) of Olmec sculptures, nor is it necessary to venture that the ancient carvers invented an artistic ideal unlike themselves in its distinctive features. It seems very probable that the type represented in the carvings is an idealization of a southern Mexican physical type which may eventually be defined when more physical studies are available from the area.

JAGUAR-MONSTERS AND JAGUARS

A variety of front-view "masks" representing animals with various jaguar (or at least feline) characteristics occur in the La Venta materials, and as is well known are common on carvings that have been recognized in the past as being of the Olmec type. The La Venta examples range widely in application, from small decorative applications to central themes of large monuments. Figure 58 shows the component parts of the best-preserved of them. It will be noted that several features occur very consistently: plumed or tufted "eyebrows" (all cases), a "notch" above the brows (in four of the six cases, if we allow the juncture of the brows of Altar 1 to count); eyes tend to be long narrow rectangles, with or without rounded corners, usually horizontally placed; the muzzle is basically a rectangle, with a thick upper lip commencing just below the nostrils, like that of human representations, and often with a lower lip that arches upward strongly. The basic "jaguar" mouth is thus more like that depicted on human figures than pure realism would allow. Prominent fangs are usually shown.

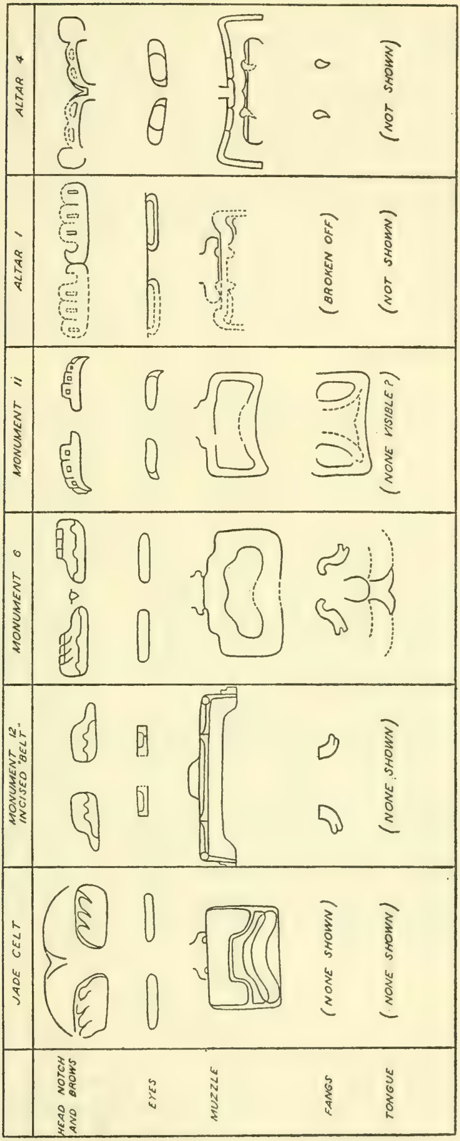
JADE CELT
MONUMENT 12 INCISED "BELT"
MONUMENT 6
MONUMENT 11
ALTAR 1
ALTAR 4
HEAD NOTCH AND BROWS
EYES
MUZZLE
FANGS
TONGUE
(NONE SHOWN)
(NONE SHOWN)
(NONE SHOWN)
(NONE VISIBLE ?)
(BROKEN OFF)
(NOT SHOWN)
(NOT SHOWN)

FIGURE 58.—Components of Jaguar-monster "masks" (not to scale).

In many cases, however (two cases in the present series), the fangs flare outward through a sharp angle, are split at the tip, and appear in the upper jaw alone, thus very strongly suggesting a reptilian type of fang. This reptilian aspect is accentuated in the mask on Monument 6 by the forked tongue lolling from the mouth. (The Jaguar-monster belt on the clay figurine body (pl. 31, *left*, *a*) also seems to have a forked tongue.) As a matter of fact, I believe that in most, though perhaps not all cases, the being represented is a monster who combines jaguar, bird, and snake traits. The plumed "eyebrows" are actually very like the crests shown on the raptorial birds (harpy eagles?); Monument 6 has on the sides birdlike three-toed paws, and Altar 1 has what appear to be plumes sweeping back on the sides of the altar on either side of the face. Also, ears are but seldom to be seen on these masks, and are found only on such definitely realistic examples as that of Altar 4.

Elements of the Jaguar-monster motif are to be seen in various other places, such as on the headdresses of various figures, for instance that of Figure 1 of Altar 5, where a small rectangle contains a face with a typical muzzle. Eyes slant instead of being horizontal, head notch, eyebrows, and fangs are missing, perhaps omitted because of the small space, or else have been eroded away. The outline of the jaguar's upper jaw and nose seem to occur on the headdresses of Figure 1 of Stela 2 (first panel above face of personage), and the headgear of Figure 1 of Altar 4. Farther up the headdress of the former are two elements which appear to be fangs of the type of those of Altar 4, but no other parts of the motif can be recognized due to the time-scarred condition of the stela.

Jaguarlike profiles occur in several places, the most easily recognized being the creatures with realistic jaguar heads, with headdresses and ear ornaments, and human bodies. The undulated line of the mouth and upper jaw link them to the Jaguar-monster masks, but it seems possible that they represent a different concept entirely, either anthropomorphic Jaguars, or men with Jaguar masks, for they consistently lack the avian and reptilian features of the front view Jaguar-monsters. In general treatment they are easier to link, from the point of view of art style, with the human figures in relief than with the Jaguar-monsters.

BIRD-MONSTERS AND BIRDS

While avian forms have not previously been recognized among the Olmec motifs, the few that occur in the collections from La Venta show very plainly that at least two aspects of them must be included in the art style. Several examples have been assembled in figure 59. Two, engraved on jade (fig. 59, *a*, *c*), have conspicuous crests, heavy hooked beaks suggesting raptorial species, and reptilian-looking fangs

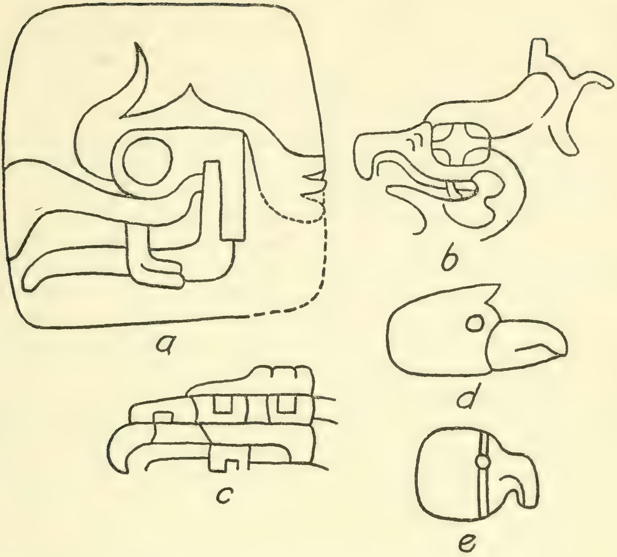

FIGURE 59.—Heads of Bird-monsters and birds (not to scale).

protruding from their upper jaws, very similar to the fangs of this sort found on certain Jaguar-monster masks. I suspect the otherwise very realistic harpy eagle (?) incised on the obsidian core may be a monster of the same kind (see figs. 48, 59, *b*), on the basis of a suggestion of a fang near the inner corner of his beak. The other birds, one from the headdress of a figure on Altar 3, the other one of the supposed glyphs from Monument 13 (and with them should be included the boldly done full-face owl head from Altar 7) seem to be realistic representations—at least they lack obvious monstrous attributes. There are also two realistic birds' heads shown on Stela 3, one on the headgear of Figure 1, the other just above the nearly obliterated Figure 9. When more excavation has been done, it will doubtless appear that Bird-monsters and various types of birds are to be added to the list of themes of the art style, varying the monotony of "Olmec faces" and Jaguar-monsters.

OTHER FAUNAL THEMES

So far but few other motifs taken from the faunal resources of the region have been found. The anthropomorphized monkey (who incidentally has plumed brows similar to but not quite like those of the Jaguar-monsters), is unique. The collection of marine objects in the

Tomb—the shark tooth, sting ray spines, and clamshell-like pendant—suggest that eventually a series of marine motifs will be found to belong to the style.

MISCELLANEOUS FEATURES

A feature of the monumental representations which invariably attracts attention is that of the beards portrayed on Figures 1 and 7 of Stela 3, Figure 2 of Altar 3, Figure 2 of Altar 6, and Figure 1 of Altar 7. Figure 1 of Stela 2 sports such an adornment although due to his weathered condition, it is difficult to see in our photographs. Some of the beards look as though they might have been false, attached to the chin by straps of the headgear, rather than to the wearer's own chin. Regardless of whether this depiction of beards was a purely pictorial device or whether it indicates a strain of southern Mexican Indians more hirsute than most, or at least prouder than most of what straggling whiskers they could grow, the early portrayals of beards can be safely assigned to the art style with which we are at present occupied, as a distinctive if irregularly occurring element. By itself, however, it cannot be considered a diagnostic of the art style, for it recurs sporadically on much later horizons, as Thompson has pointed out.[22]

Representation of human skulls is usually considered one of the typical traits of the late horizon cultures of the Central Highland. However, that the tiny rock crystal skull is not simply an atypical sport among Olmec motifs is hinted by the occurrence of two skulls among the figurines (one may represent a monkey skull rather than that of a man). Skulls may prove to be among the minor Olmec themes, distinctive on the Classic horizon.

FLORAL MOTIFS

On the various monuments appear elements that suggest stylized representations of plants, in most cases too formalized for certain identification. The main high portion of the headdress of Figure 2 of Stela 3 might conceivably represent some fruit or flower, and there is a leafy little object just in front of the bird's head on the headgear of Figure 1 which may represent a plant. Behind the head of Altar 4:1 are some leafy objects in low relief that look like leaves or short feathers made up into bundles. The ornamental border around the niche of this same figure is decorated with flowering appendages that could be interpreted, perhaps, as flowers or fruits. Aside from these, plant motifs seem definitely rare in Olmec art. They should probably be considered atypical of the style as a whole.

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[22] Thompson, 1941, p. 36. It must be noted as a caution that just as depiction of bearded figures is not invariably an early trait, neither can it be considered invariably late as Thompson has suggested in the place just cited.

DECORATIVE ELEMENTS

In the report of the Tuxtla conference are listed a number of traits and design elements considered typical of Olmec art, which we may utilize as a starting point for a discussion of decorative elements (Mayas y Olmecas, pp. 49, A; 75–78). It should be noted that these lists appear to consist not only of traits of high frequency, but are complete inventories of all the elements which are associated with objects attributed to the Olmec style. The present appraisal based on a body of associated material will enable us to make somewhat more precise definition of these features. It must be noted that many of the motifs of the report just referred to are incised on carved jade objects, and were not necessarily applied when these objects were first carved.

The first of the listed elements are squares, one type with rounded and one with sharp corners. In the La Venta material we find these elements used rarely, chiefly to indicate small ornaments, pendants, and the like. In addition to jade pendants in this form, such figures may be observed on the headgear of Monument 4, in the pendants or pectorals of Figure 1 of Stela 2, Figures 1, 6, 8, and 9 of Altar 5, as well as the earplugs of various figures, particularly those of Stelae 2 and 3. The significant point here is not simply the use of rectangles as parts of designs, a generalized vague sort of trait that might be demonstrated for almost any art style, but the fact that these rectangles are ordinarily left plain. This seems to be an expression of the restraint of superfluous ornament pointed out as a feature of the art in the discussion of representation of human figures. Maya art makes considerable use of round-cornered rectangles also, but few Maya artists could avoid the temptation to adorn these forms with faces, glyph elements, or other types of filler. The commonest variant, perhaps indicative of a trend away from the Spartan simplicity of the art style, is the inclusion of a smaller rectangle, usually in a corner or to one side of the larger one. This usage appears in the represensation of the eyes of Altar 1, on Stela 1, on the head band of Monument 4, and in modified form on the projecting top of Altar 4 (fig. 60). A second feature of significance in relation to this motif, the rounding off of the corners, may be observed throughout the decorative pattern. While angular forms rather than sinuous curves were obviously preferred, or perhaps conditioned by the use of the sawing technique of the carving, there is a patent avoidance of sharp angles. This tendency appears clearly in the jaguar mask of Monument 6, for example, where, although the design was adapted to the rectangular form of the end of the coffer, the sharp corners of eyes, mouth, etc., were rounded.

The next important element, shown in the Mayas y Olmecas series as an L-shaped figure, often appears with the short shank split or

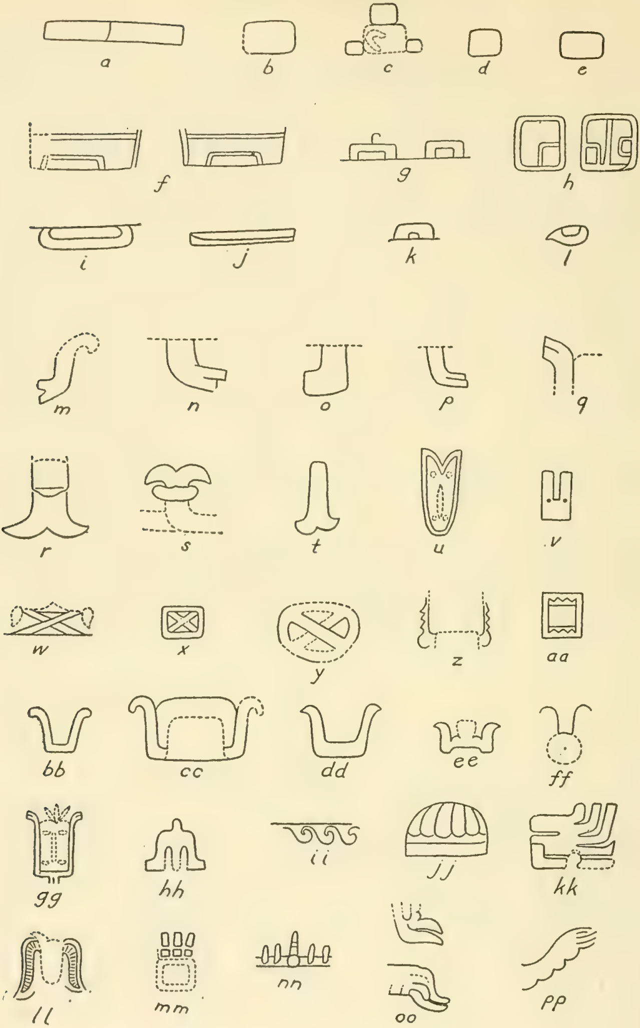
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Figure 60.—Common decorative elements, from monuments and from small sculptures (not to scale). *a*, Monument 1, headdress. *b*, Stela 2:1, pectoral. *c*, Altar 3:3, headgear. *d*, Altar 3:6, pectoral. *e*, Altar 3:10, pectoral. *f*, Altar 4, ledge. *g*, Stela 1. *h*, Monument 4, headdress. *i*, Altar 1, eye. *j*, Monument 12, belt element. *k*, Decorated ear spools (element of Bird-monster beak). *l*, Incised obsidian core (design on

notched, and frequently at an angle of more than 90° from the longer arm. The form is probably related to the conventionalization used to show the reptilean fangs of the Jaguar-monster. It may be seen in the fangs of the Jaguar-monster masks of the Stone Coffer (Monument 6) and of that on the "belt" of Monument 12, beside the mouth of that of the more realistic fragments of Monument 15, and those of the bird profiles of the rectangular jade pendants and those of the decorated earplugs, perhaps in the outline of the jade hands of the tomb, and on celt *b* of the celt cache.

The split or fork of this element suggests a relationship to another motif, the notched rectangle, or truncated V (fig. 60, *bb-hh*). This form, supposed to refer to the notched head of the Jaguar-monster,[23] is very common on pieces of uncertain cultural context, and recurs a fair number of times at La Venta. It does *not* occur, incidentally, on Monument 10, a statue of a Jaguar-monster, but is to be seen on four of the other Jaguar-monster figures. As a separate element, the form, somewhat modified, is suggested by a device on the headdress of the main figure of Stela 2 (first panel). Inverted, it occurs as a necklace pendant of Monument 12, and the forked tongue of the jaguar mask of the sandstone box. The curious elements along the side of the coffer may be variants, also (fig. 60, *s*), or they may be independent derivations of Jaguar-monster mouth representations.

The X-shaped design, suggesting two crossed sticks, is to be seen in a number of places at La Venta: in the mouth of the jaguar-mask on the projecting top of Altar 4, and on the headdress of Figure 1 of Altar 5. From point of view of frequency, however, this motif should be considered more typical of Maya than of La Venta art, for it appears on the Leyden Plate, on numerous stelae and decorated façades, as well as the much later Mayan codices.[24] If a single origin must be assumed for so simple a design element, its occurrences at

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[23] Cf. Saville, 1929. A curious association of notch and head appears in Altar 5, fig. 4, in which the headdress of the figure shown in profile seems to have a well-marked notch.

[24] Morley and Morley, 1938; Spinden, 1913, fig. 132, and passim. Its frequency in Mayan designs is indicated by the fact that Spinden considers the element a glyph which "probably has some very general meaning such as the sky as a whole."

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breast of Bird-monster). *m*, Monument 6, fang. *n*, Monument 12, fang of Jaguar-monster belt. *o*, Monument 15, appendage of Jaguar-monster mask. *p*, Jade rectangles (fang of Bird-monster). *q*, Celt *b* (fig. 47). *r*, Monument 6, tongue. *s*, Monument 6, side. *t*, Monument 12, necklace pendant. *u*, Celt *c*. *v*, Stela 2:1, headdress. *w*, Altar 4, ledge. *x*, Altar 5:1, headdress, sides. *y*, Altar 7, ledge. *z*, Stela 2:1, upper part headdress. *aa*, Altar 3:1, pectoral. *bb*, Altar 4, front: element of "floral" pattern. *cc*, Altar 5, front. *dd*, Monument 1, headdress, front. *ee*, Altar 6, headdress. *ff*, Decorated earplugs. *gg*, Celt *b*. *hh*, Stela 2:1, headdress. *ii*, Altar 3, side. *jj*, Monument 4, back. *kk*, Altar 1, side. *ll*, Stela 2:1, headdress. *mm*, Altar 5:1, headdress. *nn*, Celt *a*, "head band." *oo*, Altar 7, detail of wing tips. *pp*, Obsidian core, wing of Bird-monster.

La Venta and on the Olmecan jades would have to be attributed to borrowing from the Mayan art on the basis of frequency.

A serrate border, or one consisting of a row of small triangles, is another motif of infrequent use at La Venta. It may be seen on the headdress of Figure 1 of Stela 2, and can just be made out on the pectoral ornament of Figure 1, Altar 3. This, like the preceding, is so simple a decorative element that anything but a high frequency is probably not significant.

Far more common, if we combine two forms which vary as to positions, is a wide flaring U-shaped motif, angular with rounded corners. Examples in which it appears with the open side down very strongly suggest the muzzle or upper jaw outline of the Jaguar-monster. Occurrences are: on the headdress of Figure 1, Stela 2; celt *b*; as part of the sweeping decorative appendages on the front of Altar 4; bordering the niche of Altar 5, on the headdress of Monument 1, and perhaps as on the headdress of the figure of Altar 6. It is impossible to determine if the very characteristic archway framing the main figure on the several altars and Stela 3 is a specialization or the source of this element.

Among other characters of the art style postulated by the Tuxtla conference are: rarity of spiral ornament and absence of (representation of) feather ornament (Mayas y Olmecas, p. 78). Actually, we find carvings representing feathers to be more frequent than spiral designs. The critical point is not presence or absence of feather ornaments, but rather a very simple mode of showing these objects, quite unlike the sweeping elaborate feather ornaments typical of at least the later phases of Maya stela-carving. Feathers are indicated on the headdresses of Monuments 4 and 13, and Figure 1 of Stela 2, and probably on the staff held by this same figure, and certainly on the staff of Figure 3 of Stela 2. The leaflike forms back of the head of Altar 4:1 may be feathers, also. The sets of curving elements above the eyebrows of the jaguar-mask of the coffer suggest feathers, as do the angular devices on the sides of Altar 1, and it may be that the three small elements above the small mask on the headgear of Figure 1, Altar 5, were also meant to show short plumes. Spirals, on the other hand, occur only as a border above Figures 2 and 3 of Altar 3, and on the staff of Figure 7 of Stela 2.

SUMMARY OF STYLISTIC FEATURES

The foregoing series about concludes the recurrent decorative elements which can be pointed out in the La Venta material. It will be well to summarize the style as thus far defined, remembering that significant negative elements can be added for purposes of more precise definition after comparison with art styles of neighboring regions.

General.—(1) Representations are chiefly of adult human beings (both males and females, and only occasionally infants), and "jaguars" (including Jaguar-monsters and beings with jaguar heads and human bodies). Occasional appearance of bird heads, suggestions of plant designs, etc. (especially as headdress ornaments), indicates a wider range of subject is expectable, without negating the dominance of the first-mentioned themes.

(2) There is a very evident restraint, or avoidance of superfluous ornament. Clothing and ornaments are often faithfully shown, but are not covered with decorative detail, relief patterns show large blank areas between figures.

(3) Carving, whether in the full-round or low relief, is nearly always in true relief, with prominent parts shown realistically by rounding or modeling, with realistic handling of perspective. That is, the representations are essentially three-dimensional. Champlevé, or cameolike carving, with flat surface set off by removal of the background, occurs only rarely, and then in applied designs such as the Jaguar-monster masks. Incised (drawn, or completely two-dimensional) patterns, likewise rare, are to be seen only on small objects, such as the rectangular jade pendants, and the hands, from the tomb, and the ear spools from the cist.

(4) A trait especially prominent in the representation of human beings, but discernible to greater or lesser extent in all carvings, is the dynamic movement of the figures. Nearly all, large and small alike, sit, stand, crouch, and even walk and jump, as though they had real weight and mass, whether sculptured in the round or in relief. There are but few that are static—Stela 1 is one of these, due in part to the restraining frame around the figure (and in part as well due to the fact that it is seen and photographed from an angle as though it were lying down, instead of from directly ahead, as it should be). In this respect there is a marked difference between these carvings and the carvings and paintings of most other Mesoamerican cultures, which as a rule are stiff and static, even when shown in postures indicative of movement. This is not the place for detailed comparisons—another section will be devoted to them—but it may be pointed out that Maya art is typically static. The only honorable exceptions are the magnificent sculptures of Palenque, and Piedras Negras, and occasional others from western Maya territory, and certain carvings from Quiriguá and Copán. The same rigidity may be seen in most other carving from southern México, and even in painted representations of men and animals.

Human figures.—(1) The head and face outlines consistently show great bigonial width in front views, massive jaws and round protruding chins in profile. Where material permits, elongate truncated head deformation is shown in uncovered heads. Mouth and nose are highly characteristic, the former depressed at the corners, with full everted lips that curve upward to the base of the nose, with little or no integumental lip shown. Noses are broad, heavy, in front views and in the round flat; in profiles, high-bridged. Eyes tend to be ellipses, pointed equally at both ends in the larger figures, nearly level in front views, of the same form, but slightly slanting toward the nose in profiles. Ears vary: in small pieces they are conventionalized to slender rectangles; in larger figures are more or less realistically shown.

(2) Bodies are shown in simplified realistic fashion. Appendages are simplified, sometimes omitted. Emphasis is on structural masses. Figures are reasonably well-proportioned; "out-of-drawing," jointless bodies and limbs never occur. No phallic elements occur.

(3) Postures are varied: standing, seated cross-legged, kneeling, crouching. Probably the only significant posture is that of the figures seated cross-legged in front of a niche (cave or doorway?) of a massive monument.

(4) Dress varies from simple breechclouts and kilts to belted tunics, long capes, elaborate headdresses. Ear spools, necklaces and pendants, wide low collars, bracelets and anklets are common. There seems to be no diagnostic type of garb. Figures are shown as barefoot, usually, though there is one example of a sandal with heel guard (Monument 13) (fig. 61) and two examples of what appear to be pointed-toed moccasins (?) (Stela 3). The only significant feature seems to be the absence of "aprons" or of long decorated ends on the breechclouts. Ceremonial staves appear in some variety (as on Stela 2, where the principal figure carries one with a face with plumed eyebrows), but are neither as elaborate nor as stereotyped as the Mayan "ceremonial bars." The depiction of an obsidian-edged sword is of interest chiefly in connection with the traditional absence of the weapon in ancient times in the lowland (cf. Mayas y Olmecas, p. 81).

Jaguar-monster and jaguar representations.—(1) The Jaguar-monster masks, showing the face of this animal in front view, differ markedly from the profile jaguar heads of the beings on the stelae. Probably the mask, or Jaguar-monster theme, has a long history as an applied design. It is characterized by a notched frontal, eyes sloping to the inner corners, plumed eyebrows, broad nose touching the upper lip, and in some cases a similar form of down-at-the-corner mouth similar to that of the human representations (fig. 58). The upper canines are emphasized, often shown as forked. Nose ornaments, tongue (usually forked), etc., may or may not be shown. Feathers occur on some examples.

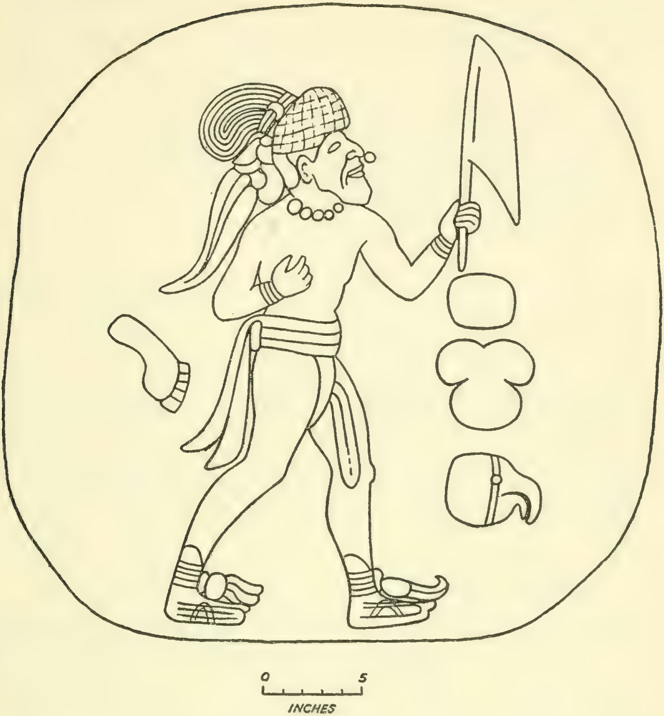

Figure 61.—Outline of figure on Monument 13.

(2) Jaguar heads in profile, and there probably will be found front view or full-round carvings of the same type are realistic, even where shown attached to humanlike bodies. Such forms have, obviously, little diagnostic value. Profiles of the mask conventionalization do not occur in the La Venta series.

Minor themes.—A small series of minor themes of carvings, minor in the sense that they have been found so far in relatively limited numbers, include Bird-monsters (a crested raptorial species with reptilian fangs, and perhaps other nonavian attributes), realistic birds in some variety, and perhaps a variety of marine forms. It is worthy of comment that realistic snakes do not appear among the carvings[25] and even more significantly, the Plumed Serpent motif, which as Spinden has demonstrated is such a basic and important feature of Mayan art, never appears.

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[25] A few examples of realistic serpents occur on the monuments of the Olmec, or partially Olmec site of San Lorenzo Tenochtitlán, whose temporal placing has not as yet been defined.

Decorative elements.—The following motifs occur in the sparingly decorated areas often enough to make them fairly diagnostic traits:

Open rectangles, usually round cornered,
Rectangles enclosed within others, usually asymmetrically,
L-shaped (or wider-angled) elements with split or notched ends,
Notched rectangles or thick-armed truncated V figures,
Flaring U-shaped elements with outcurved tips (perhaps derivations from the mouth form of the Jaguar-monster mask),
Simple, rather short and stiff feather motifs.

Sporadic elements.—In addition to the nondiagnostic traits mentioned in the discussion of representations of human beings under (3) postures, and (4) dress, there are a series of motifs and elements in the art style which are not distinctive. That is to say, unless they appear in conjunction with some diagnostic element or elements, as above, they cannot be relied on to assign an object to the art style. These include: sporadically used faunal themes (the monkey, the kinkajou (?), etc.), beards on human figures, the X-shaped design element, bordering rows of triangles, occasional use of simple scrolls, and occasional use of simple plant (or "floral") motifs.

AREAL RELATIONSHIPS OF THE ART STYLE

The purpose of the present section is not to discuss the areal range from which stray pieces assignable to this art have come, but to draw comparisons with sculptural complexes of surrounding regions. We shall discuss materials from nearby southern Veracruz, Central Veracruz, the Maya area, Oaxaca, and the Valley of México, in that order. It would be a nearly endless task to deal with this vast corpus of material in any detail, of course. Consequently, summary characterizations of the carver's art in each region will be drawn upon where available, except in the case of the first region of our list.

SOUTHERN VERACRUZ AND ADJACENT REGIONS

Comparisons in the southern Veracruz region are of necessity restricted principally to the site of Tres Zapotes. It would be a useless piece of academic virtuosity to approach the problem of the comparison of the sculptural arts of La Venta and Tres Zapotes as though the relationship between the two sites was unknown. La Venta, as ceramic comparisons indicate, represents one segment, or temporal horizon, of Tres Zapotes culture. The longer occupation at the latter site comprises a series of such segments, Upper, Middle, and Lower.

That the stone carving art corresponds at the two sites, the recurrence of colossal heads suffices to show. The main problem here is that of the possible wider range in time represented by the Tres Zapotes specimens.

There are at Tres Zapotes, among the various battered and eroded monuments, three representing human beings which manifestly belong to the same art style as the La Venta specimens. These are the colossal head, the fragmentary seated figure (Monument M), and the head protruding from the long plain tenonlike block (Monument F) (Stirling, 1943 a). The first-named presents all the diagnostic features of the art style in general, as well as being in particular details nearly identical with the better-carved of the La Venta heads. The heavy-jowled squarish face, elliptical modeled eyes, broad nose set directly above the everted upper lip, as well as the simple type of headgear with a chin strap, all serve to identify the object. The only novel feature is the long horizontally placed earplug. The second specimen is very similar in posture, seated, with the head tilted back slightly, to La Venta Monuments 9 and 10. It is safe to venture that when intact, the figure was represented as cross-legged, probably with hands on the knees. The elongate flat-topped head with simple head band, rectangular facial outline with heavy square jowls, and the long rectangular ears, place it definitely in the art style. What can be seen of the mouth form indicates that the upper lip was thick, everted, and without an integumental area. The third specimen, in facial outline, type and relationship of mouth and nose, can safely be placed with the other two in the same art style as the La Venta specimens. All three probably are referable to the same temporal horizon.

The Jaguar-monster mask-panel on the obverse of Stela C (cf. Stirling, 1940 a) differs from the Tres Zapotes pieces just described in its relation to the Olmec art style, in that while it contains a series of significant resemblances to the La Venta Jaguar-monster representations, it also shows certain points of difference (figs. 62, 63). The eyes are similar to the typical Jaguar-monster eye in general, being elongated near-rectangular figures, basically, but the line of their lower borders is interrupted by shallow depressions, almost as though these features were first laid out shorter and wider, and then altered into the narrow elongate form. The muzzle contains the typical broad flaring nose and nostrils immediately over the upper lip. The mouth parts are quite complex, and by the same token none too clear. There is (on the observer's left), an L-shaped appendage with curving upper arm that arches toward the base of the nose in a fashion that suggests very strongly the upper lip forms of the Jaguar-monsters on Monuments 6, 11, and 12 at La Venta. There is no mate to this element on the opposite side although a small rectangle marks the point in which its tip would have come. The lower jaw is indicated as a smaller form between the projecting fangs; it is similar to several La Venta lower jaws, and is the inverted version of the common flaring **U**-shaped element with re-turned tips. By another interpretation, the rectangle formed by the narrow band that frames all the mouth parts below the nose might be seen as the mouth outline, and in that case the odd **L**-shaped element might be considered an extra fang. The principal (or most obvious) fangs are quite similar to those of La Venta Monument 6. There is even a hint, on one photograph of the battered Stela C, that their tips may have been notched, although this is uncertain. The small but very clear forked tongue is certainly significant. Further points of difference include the extreme angularity of the Tres

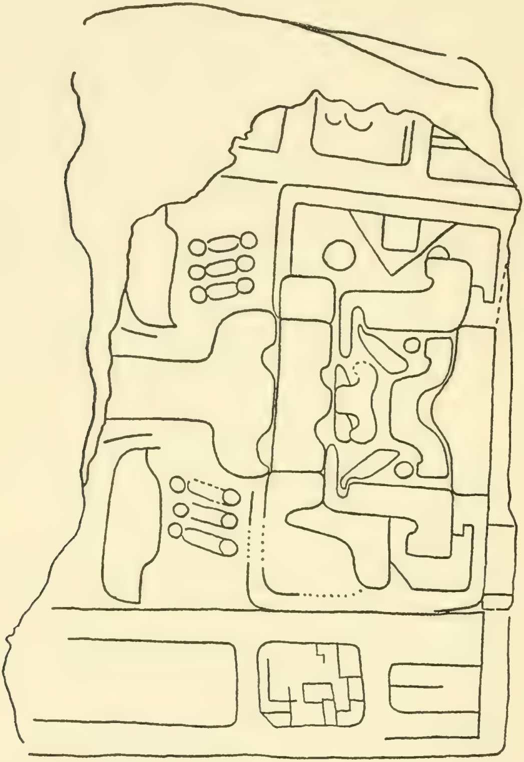

FIGURE 62.—Jaguar-monster, Stela C, Tres Zapotes.

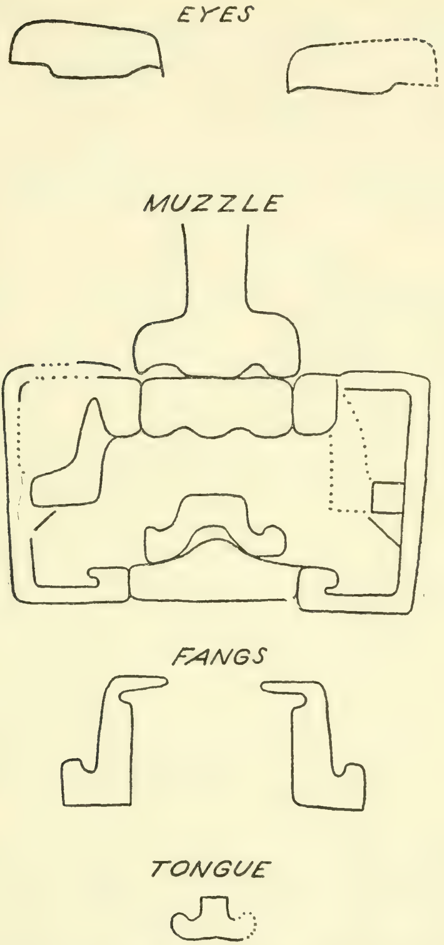

Figure 63.—Component parts of Tres Zapotes Stela C Jaguar-monster mask-panel.

Zapotes carving, the application of small decorative elements on the cheeks (which are similar to forms considered at La Venta to represent feathers), and the presence of what appear to be earplugs at the sides of the head. It is unfortunate that the stela did not break off a few centimeters higher up, so we could see whether the usual plumed eyebrows were carved on it.

The total effect of the Stela C Jaguar-monster is, in short, that of a rigid, angular, extremely conventionalized and complex version of the Olmec theme, and one perhaps that was not quite understood by the artisan(s) who carved it, in view of the omission of one of the mouth elements on the (observer's) right side. In view of the fact that the design is associated with what is probably a very early date, carved on the other face of the stela in the same technique, it is necessary to consider the possible significance of the points of difference of this specimen from the more typical treatments of the same theme.[26] The most patent suggestion is of a trend from more rigid conventionalization, in the Lower Tres Zapotes Period to which Stela C belongs, toward increased realism in the carvings of the La Venta and Middle Tres Zapotes level. ("Realism" of course refers to the methods of representing the particular elements depicting animal attributes of the monster.) However, when we come to examine the source of the apparent conventionalization, we find much of it to lie in the techniques of workmanship rather than in conceptualization of the design. The Tres Zapotes Jaguar-monster is formed of long slim bands sawed out of the matrix, with adjacent area beveled down slightly to set them off in a semblance of relief. It is this sawing technique that produces the angularity, and consequently the rigidity and impression of extreme conventionalization, of the design. As a matter of fact, sawing was an important sculptural technique at La Venta, and long sawed-out bands occur on some of the La Venta monuments (Monument 6, the headdresses of Figure 1, Stela 2; Figure 2, Stela 3; etc.), the chief difference being that corners formed by lines meeting at angles were rounded off. It is the rounding off of the corners that produces the softer fluid effect of these portions of the La Venta designs. In other words, most of the apparent differences of the Stela C carving stem from a slightly less refined use of one of the chief carving techniques of the art style, which appear full-blown on the following (La Venta) horizon. It is probable that further excavations will show the more angular type of representation to have been typical of a phase of the art style that preceded its florescence on the La Venta time level. One is tempted to point to the omission of one side of the mouth parts on Stela C as further evidence of the carving having been done during a developmental phase of the art, when its significant features were not clearly understood, perhaps, but that would hardly be a fair argument: early artists have no monopoly on errors—their sophisticated heirs can make mistakes too.

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[26] The grounds for regarding the date as being a contemporary 7th Cycle one have been set forth by Stirling (1940a), and discussed pro and con by a number of writers (see, for example, Morley, 1946, pp. 40 ff.). There is no point to going into the question at length here, since I have nothing to add from the calendric or epigraphic side. However, it seems well to repeat the following cogent reasons why the probability of the stela (with both date and design) belonging to a very early period cannot be thrown out of court in an offhanded fashion just because it comes from a site outside of known Mayan territory: (1) On the basis of ceramic evidence a Middle Culture horizon, approximately contemporary with Mamom and Chicanel periods of the Petén, exists at Tres Zapotes. A 7th Cycle date would presumably fall within the upper range of this horizon. (2) A bar-and-dot numeral (Monument E), is carved in the bedrock in clear association with a portion of the actual early (Lower Tres Zapotes) deposit (cf. Drucker, 1943 a, p. 34), indicating that both stonecarving and the use of bar-and-dot numerals were known at that early time. If we also take into consideration Caso's demonstration of use of probably calendric bar-and-dot numerals in Monte Albán I (Caso, 1947), the case is strengthened still more, for it seems likely that carved dates may have been in vogue over a wide area of southern México during Middle Culture times, considerably before they made their first known appearance in the Maya area proper.

The other Tres Zapotes stelae are too weatherworn to serve for detailed comparisons. In passing it may be noted that the largest (Stela A) has a jaguar mask panel on the upper portion which seems to belong to the general pattern of this theme; other details are indeterminable. The Tres Zapotes stone coffer falls in another category. Although somewhat broken, the design that remains is still clear. Despite the generic conceptual similarity of the large carved stone container with the Stone Coffer of La Venta this piece has little close relationship to the La Venta specimens. The general impression of stylistic difference that it gives due to the overburdening of design areas, the flat cameo or champlevé type of carving, and abundant use of elaborate scrolls and spirals, is borne out by examination of detail of figures and motifs. While the human figures suggest vaguely the jaguar-headed beings of the La Venta stelae in posture, treatment of eyes, noses and mouths differs completely from the La Venta stylistic pattern. In addition, the fact that the bodies are both out of proportion, and limbs are stiff-jointed and curveless indicates a different concept of representation. The jaguar face on the most nearly complete side lacks the branched eyebrows, the protruding fangs, and the typical mouth form, as well as the lower jaw of the typical Jaguar-monster, and thus gives a different effect, despite similarities of eyes, nose form, the frontal notch, and forked tongue. Most striking of all is the occurrence of the Plumed Serpent motif, which we have not observed either at La Venta, nor, to anticipate a bit, in any object carved in the same style. In fact, one of the important negative characteristics of the style is the absence of this motif. Consequently, it seems reasonably certain that the stone box at Tres Zapotes represents strong influence of an art of different genre. The problem of chronology, in the absence of clean-cut associations, cannot be solved for the present. From the point of view of technical skill, one would doubt strongly that the box was made contemporaneously with the low-relief, angularly sawed-out jaguar mask of the dated stela, even by allowing for some other source of artistic pattern. Technically it could be put on the horizon of the colossal head and other stones assigned to the horizon of the La Venta monuments. In this case, however, we should have to look for a near but distinct culture from which might have sprung so different a type of artistic treatment. Ceramic evidence, however, suggests the Middle Period to have been essentially a phase of cultural isolation, in which preexisting patterns were locally elaborated. Without being able to bring proof, I prefer to assign the box to the following time horizon (that of Upper Tres Zapotes), accounting for its divergence from the pattern on the basis of a continuation of the trend from angularity to curvilinear design suggested for Lower to Middle Tres Zapotes Periods, a tendency toward filling of all design areas, perhaps accompanying increasing technical skill, plus the introduction of certain new concepts such as the Plumed Serpent, cosmic scenes, as well as new notions of representation of human figures. Contemporary with this late, hybridized manifestation of the style may be other new elements, such as the cylindrical or truncated conical stones with a shallow basin in the top, and some of the cruder small stone carvings at Tres Zapotes.

Stela D (Stirling, 1943 a, pl. 14) presumably would also fall into this late bastardized school of art, with its stiff ill-proportioned figures, its general artistic weakness, and the Plumed Serpent motif on the sides.

Turning now from stone monuments to small art objects, we may note one outstandingly significant piece: a strongly carved fragment of green serpentine (?) from a stratitrench, Trench 13. A drawing of this specimen appears in plate 66. The object when complete seems to have been a mask, hollowed out (but not polished) on the inner side. The fragment consists of a typical Jaguar-monster mouth, with protruding angular fangs. The ends of the upper fangs are forked. Just over the edge of the thick everted lip is a drilled hole which probably represented one of the nostrils. In both features and proportions, the piece is identical with the famous "jadeite ax" in the American Museum of Natural History (Saville, 1900), long considered a perfect example of the "Olmec" art. Of especial importance for checking the chronological placing of the art style is the fact that the mask fragment came from a stratigraphic trench—specifically, from a pit in the bedrock filled with deposit of pure Middle Tres Zapotes refuse and sherds (Drucker, 1943, a, p. 93).

Relatively little jade, and nothing aside from rather nondescript beads and one battered fragment of the torso of a jade figurine was found at Tres Zapotes. If we extend our inquiry however to small figures of other materials, we find that the clay figurines, especially those of the Lower Period (types I-A-1 and I-A-2), designated in the Tres Zapotes report "A" and "C", conform surprisingly well to the pattern defined for the jade figures from La Venta. The punctations in eyes, nose, and mouth correspond exactly to the locations of the drilled pits in the jade specimens. Head form, although partially obscured by headdresses or hair, definitely suggests elongation like that of the jade pieces. The facial outline is likewise heavy, with great bigonial width. It is precisely in this regard that these clay figurines differ most strongly from both Huaxtecan punctate figurines, and those of early Mayan horizons, both of which types tend to have receding chins and narrow tapering jaws. The punctations at the corners of the mouth consistently are lower than the median point of the mouth, giving the familiar curvature. Form of lips only approximates that of the jade figurines, because of differences in the media. Fully everted lips are probably easier to carve than to model in soft clay where overenthusiastic representation of this feature might obliterate the nose modeled above it. Nonetheless, the resemblance is close. Bodies are represented with identical repression of sexual features, accentuation of rounded contours of muscle masses, and considerable realism of proportion. We may note that a larger proportion of the clay figures seem to represent females, but this may not be significant. Females are also shown, if less frequently, in the type-lot of material from La Venta. It is not inconceivable that there was a gradual change in predominance of subject over the period from Lower to Middle Tres Zapotes. The question of time difference obtrudes itself here once more. The occurrence of clay figurines of a preceding period conforming stylistically to the art pattern established for stone carving reaffirms our supposition of a long period of development of the style. The La Venta material is stylistically full-blown, with a long history behind it. Ancestral forms, possessed of nearly all the diagnostic traits, but perhaps, if the Stela C Jaguar-monster carving is typical, slightly cruder technically, will undoubtedly be found on the Lower Tres Zapotes horizon. In the subsequent Middle Period, the stone carving continued along the established patterns; the making of clay figurines, perhaps because of the greater plasticity of the medium itself, was less restricted in form, and expanded into a much greater range of variations. The III–A types of figurines ("baby-face" types), first appear in Lower Tres Zapotes (fig. 64), and continue their separate course through Middle Period times. In a perfected modeling technique, they parallel closely the superior and most realistic of the jade forms.

The invariable use of punctations to indicate features in all Lower and most Middle Period clay figurines, in the eyes, nostrils, and mouth corners, precisely the places in which drilled holes appear in the jade figurines, has led to the suggestion that the objects of clay were imitations of earlier stone carving. I am sure, however, that the

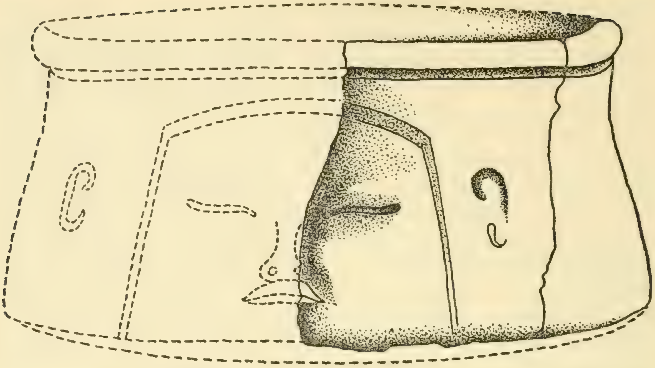

FIGURE 64.—Fragment of small effigy bowl, Figurine type III–A–3, in low relief and incising, and reconstruction of missing portion, from Lower horizon at Tres Zapotes. Over-a l height of fragment, 5.6 cm. (Originally published as fig. *t*, pl. 35, Bureau of American Ethnology Bull. 140, but detail lost in reproduction.)

genetic implication here is fallacious. Clay figurines are too firmly associated with early Middle American horizons for them to have been long preceded by a complex of the technological level of carving of substances like jade. Undoubtedly, in the early phases of the carver's art, an already existing clay figurine pattern was modified to simulate not only the type but the technology of the stone pieces.

Our stylistic comparisons with the Tres Zapotes material have carried us afield not only in space but in time. The material referable to our art style from this stratified site suggests, if tentatively, a developmental sequence: an Early phase, on the time level of Lower Tres Zapotes, in which the style appears with most of its assemblage of defined traits, but with a slight inferiority in technique; a Classic phase, represented by La Venta, and on the time level of Middle Tres Zapotes, in which the style arrived at its climax both technologically and artistically; and a following Ornate phase (Upper Tres Zapotes) in which new features, such as exuberance of decoration, introduced motifs, and the like, obscure the restrained realism of the earlier pattern. Probably we shall be able, some day, to divide the first phase into Developmental and Early Developed stages. This sequence, which appears so close to what seems to be the normal life history of an art style would scarcely be worth mentioning were it not for the opinion which in recent times has come to be expressed rather often as to the extreme age of the so-called "Olmec art" as represented by pieces obviously assignable to the Classic phase. It can be shown that this art style is, even in its fully developed form, of moderate antiquity, and that its roots go back into an early horizon, but it by no means has a claim to being the oldest style of the area. The Leyden plate is every bit as Mayan in style as the Stela C Jaguar-monster is Olmec and doubtless represents at least as long a developmental history. The two strains of art, as far as present knowledge goes, must have had nearly contemporary beginnings: certainly neither was ancestral to the other.

The stone monuments, except for one stela, found by the Tulane University survey in the Piedra Labrada-San Martin Pajapan region, belong, as one might expect, to the Olmec style.[27] The San Martin Pajapan monument in particular, as Saville recognized, is nearly a classic example of this art. Interestingly enough, it shows in juxtaposition a human face as represented in the style and a jaguar mask (on the headdress) with notched forehead, slanting eyes, and exaggerated mouth. On the sides of the mask are said to be backward projecting featherlike forms which suggest a close similarity to the feathers on the sides of the jaguar altar at La Venta. Unfortunately there are no photographs shown of the designs of the sides, so that it is impossible to analyze this and the "conventionalized rattlesnake" to which Blom refers (Blom and La Farge, 1926, p. 45). The "female idol" at Piedras Labrada (ibid., fig. 40) on the basis of its elongated head, heavy jowls, long rectangular ears, and type of mouth and nose, likewise falls into the pattern. The indication of hair hanging down the back by means of "fine parallel lines" reminds one of the female figurine from the La Venta tomb. The crouching animal figure (ibid., fig. 39) suggests the monuments with "tenonlike" bodies at Tres Zapotes, and the "small stone basin" mentioned as associated with this object may be of the type of the stone basins at Tres Zapotes, for which an Upper Tres Zapotes date has been suggested. The lateness of some of the Piedra Labrada remains is further indicated by the legged metate said to have been found there (ibid. p. 39, and fig. 37), for legged metates while as yet not accurately placed at Tres Zapotes are found at the latter site either in the Upper Period or in post-Tres Zapotes remains, never in Middle or Lower horizons. Thus it would seem probable that the Piedra Labrada remains represent perhaps two periods or phases of the art style. Such an explanation would account for the anomalous type of the Piedra Labrada stela (Stela 1) (ibid., pp. 40–41, fig. 38) whose carvings may be elements derived from other style centers than those of the Tres Zapotes culture.

It would be a neat and happy circumstance if the Tuxtla Statuette fitted stylistically into the Early phase of Olmec sculptured art. Accepted, though not without misgivings, as the earliest dated object of native America at the time it was first described, the object has recently been rediscussed by Morley and by Thompson, both of whom cast doubt on the contemporaneity or correct reading of its date (Morley and Morley, 1938, p. 8; Thompson, 1941, pp. 8–10, 27–29). Both these writers characterize the figurine itself as un-Maya in type and are unable to assign it specifically to any other known Middle American art pattern. It fits our present art style no better. While we have noted occasional bird figures among the carvings, there are none that in detail or general treatment approximate the Tuxtla Statuette. Only the long angular ears and the wide-flared nose of the statuette, and the combination of relief carving and incised outlining of features (on the beak of the statuette), which occurs on the first-described of the La Venta figurines, are at all similar. The eyes in form and execution are unlike the normal type of carving; there is no indication of head deformation, the treatment of the wing feathers (by sawed lines for edges, and engraved rectangles on the tips), is different from the few examples of feathers we have noted in the style. In brief, the type of the object is still anomalous. The incised glyphs which adorn the four sides show fewer similarities to the series of decorative elements elsewhere defined as typical of the Olmec art style than to Maya glyphs.[28] The source of the statuette, in brief, remains as obscure as before.

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[27] Blom and La Farge, 1926, pp. 40–47. Saville, 1929, gives a clearer picture of the San Martin Pajapan monument than does Blom (fig. 90).

A specimen whose exact provenience is unknown, said to have been found at Simojovel, northern Chiapas, which Stirling has photographed (pl. 59, *right*), is worth describing because of its faithful adherence to the norms of the art style. The object is a long slender celt of black slatelike stone. On one side is a boldly engraved profile of a human face with protruding forehead and chin, elliptically shaped eye, down-at-the-corners mouth with thick everted lips, the upper of which touches the nose. Above the head is a headdress apparently representing a jaguar, although the component parts are altered from their natural order: the eye and branched eyebrow are below the level of the nose. The outline of the eye suggests, indidentally, the L-shaped element often used to represent jaguar fangs. The headgear is held on by a chin strap. Above and below the head (it should be noted that the top of the figure is as usual toward the bit of the celt) are geometric decorative elements. The photograph suggests that some at least of this supplementary design—for example, the zigzag lines and hachure of the lower bands—may have been applied long after the original carving of the celt, for the lines seem much lighter and less regular than the firm bold lines of the main design parts. Among the more strongly carved decorations appear notched (V-shaped) figures, L-shaped figures, and enclosed rectangles, all of which belong to the series of diagnostic elements, as do all the features of the profile and headdress.

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[28] Count of elements shows 7 certain (and 1 questionable) similarities of the glyphs to Olmec motifs; 4 certain and 3 questionable similarities to Caso's series of Zapotec glyphs; and 22 certain and 9 questionable resemblances to Whorf's list of Maya glyphs (Whorf, 1933). The point here is not the correctness of Whorf's interpretations, of course, but the fact that his list represents a series of the commoner noncalendrical glyphs.

CENTRAL VERACRUZ

The central, and probably the northern portions of the state of Veracruz come into consideration for several reasons. One is that occasional jade figurines, or figurines in other hard stones, of unmistakable Olmec type have been found here and there throughout the state and even in adjacent portions of Puebla. There were a few—half a dozen at most—among the numerous pieces in the Cerro de las Mesas jade cache, and several others of known provenience have been published.[29] The second reason is that Central Veracruz appears to be the source of a series of elements, such as carved stone yokes, "hachas" (thin flattish stones with a face in profile), "palmas," and certain others which recur rather widely on the Pacific side of the Isthmus of Tehuantepec, and which have been mistakenly attributed to the Olmec, as for example by Thompson, in his stimulating discussion of the distributions of these objects.[30] The source of this latter confusion is twofold: first, fragments of yokes and hachas (and Laughing Face figurines, as well), were found at Tres Zapotes. Weiant describes a number of yoke fragments; the point is that all the excavations from which these pieces were excavated were Upper Tres Zapotes, and these traits apparently must be considered intrusive elements introduced along with the host of alien patterns toward the end of the Olmec occupation of the site.[31] Second, the occurrence of these features at Cerro de las Mesas has nothing to do with the Olmec question, for as I tried to make clear, Cerro de las Mesas had throughout its occupation but the very slightest contact with the Olmec region, and was essentially a transplanted Highland pattern with a base of presumably old unspecialized coastal traits (Drucker, 1943 b, pp. 85–86). The developed Olmec culture, as manifested at Tres Zapotes, never extended north of the Papaloapan, so far as can be determined.

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[29] Stirling, 1941; Kelemen, 1943, pl. 248, *d*; Covarrubias, 1944 a, second plate, "figure of a bearded man;" Strebel, 1885–89, vol. 2, pl. XIV, 29.

[30] Thompson, 1941. There has also appeared a tendency, since "Olmec art" has received so much publicity, to attribute various other types of objects to it, at least in several recent books on Mexican art. Thus the well-known central Veracruz "Laughing Face" figurines are designated as examples of "Olmec art" by Toscano (1944, pp. 446, 448, 449).

[31] Weiant, 1943, p. 118. Unfortunately no examples were found in the stratigraphic trenches dug the following season. Weiant's cuts in the "Ranchito" locality were all in Upper Period mounds—his "Middle Tres Zapotes ceramics" (ibid., p. 118) are actually Upper.

On the contrary, Central Veracruz would seem to be a region in which a unique high culture, or high cultures, developed at a fairly early time, and to a certain extent independently, although indubitably affected by influences from the Highland. It seems likely that the roots of the Central Veracruz pattern may have lain in the same undifferentiated coast culture from which were derived the monochrome pottery horizons of Lower Tres Zapotes, Mamom and Chicanel in the Petén, and Playa de los Muertos, but there must have been an early diverging and specializing along local lines. As already remarked, subsequent to their divergence, Central Veracruz received far more influence from the Highland than did the neighboring patterns to the south. That there was some interchange cannot be doubted, but the traits, or better, the individual objects that passed from one group to another did not become incorporated in the culture. The jade cache from Cerro de las Mesas (from Lower II, roughly contemporary with Upper Tres Zapotes) shows this clearly: among nearly eight hundred pieces there are scarcely half a dozen identifiable as Olmec in style—there are far more of Oaxacan and Teotihuacán type.

The find of a mirror back carved in unmistakable Central Veracruz Tajín style in a tomb of the Esperanza period at Kaminaljuyú confirms the Tres Zapotes importations and Cerro de las Mesas materials in one important respect: it demonstrates the antiquity of the distinctive Central Veracruz art, so often considered to be a late "Totonac" manifestation.[32] This is not the place to make a thorough analysis of the art style, but casual inspection shows it to be distinctive in its combination of intricate abstract elements (such as the characteristic interlocked scrolls) with realistic forms. There was an obvious tendency to fill all available space in a manner more reminiscent of Mayan carving than of that of the Olmec. In addition, there was a development of applied design—adapting a realistic form to an object of quite dissimilar outline—unexcelled elsewhere in Middle America. Even so abbreviated a thumbnail sketch brings out the fundamental differences between Olmec and Central Veracruz art. Each had its own quite independent development. It may be that both styles sprang anciently from a common source, but if so, they diverged so early that they cannot be linked through a stylistic evaluation of the end products of their histories. The only possible interrelationship, and this is purely speculative, is that perhaps the modification of late Olmec art (if we are right in referring the elaborate over-ornate carving of certain objects at Tres Zapotes to the Upper horizon there), might reflect the intrusion of Central Veracruz influences.

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[32] Kidder, Jennings and Shook, 1946, p. 130 and fig. 156. Incidentally, in view of the now apparent temporal placing of this style (Cerro de las Mesas Lower II–Upper Tres Zapotes–Esperanza), I feel that the designation "Totonac" should be discarded, at least until we have some time perspective on Totonac culture. "Totonac" is an ethnic term, referring to a people known from early historic records, and archeologically by material of the Cempoala-Cerro Montoso-Isla de los Sacrificios type. I know of no evidence that they either made yokes and palmas and Laughing Face figurines, or that they actually inhabited the region in the periods when those objects were being made. They may perhaps have done so, but there is as yet no proof.

THE MAYA AREA: THE PETÉN

Morley has emphasized the fact that in all probability "the earliest Maya texts were carved on wood or were painted on fiber paper or skins which because of the perishable nature of these media have long since disappeared. Indeed, only by such an assumption can we explain the archeologic fact that already in the earliest dated records the chronology (the I. S. count) and the hieroglyphic writing itself are fully developed, complete, perfect" (Morley, 1938, IV, p. 317).

A corollary of this proposition is that the carvings and motifs with which these inscriptions are so intimately associated had a similar origin, at least so far as the Maya are concerned. Maya sculpture very clearly suggests a derivation from painting, and it is precisely in this respect that it differs fundamentally from the carver's art of the Olmec style. That is to say, the carved compositions from the Maya area indicate very plainly that Maya art had its origin in two-dimensional representations, while the Olmec style in approach and detail shows a long familiarity if not origin in relief treatment. Maya carvings are characteristically not sculptures but flat-surfaced drawings given emphasis by the cutting away of the background and the incising of minor details. A few points will emphasize this difference further. We have seen in our stylistic analysis that the Olmec sculptors undertook full-round and front-view representations of human figures quite as readily as low-relief profiles. In fact, they seem to have preferred bold and full relief—low-relief profiles are used only in the case of minor personages, and in elaborate compositions in which they might be counted a labor-saving device. Full-round and front-view human figures, on the other hand, are extremely rare in the Maya area, except at two sites near the western frontier of Maya territory: Piedras Negras and Toniná, and two of the southernmost: Copán, and Quiriguá.[33] The implication of this fact is plain. Profiles of the human form, and especially the face, lend themselves far better to pictorial representations than do front views where either perspective is not well understood or the artist's pallette is limited. To a sculptor, on the other hand, a full-face view offers no such problems: the perspective of the features emerges by itself as a function of successful handling of the profile. Thus the much higher proportion of profile representations in Maya art is not a random pattern, but indicates a fundamental difference between the two art styles. The deviation from the normal Maya presentation at the four sites mentioned is very likely significant, the Toniná and Piedras Negras by virtue of their geographical situation were the most exposed to influences from the culture of the Olmec, and future research may show the frontier cities of Copán and Quiriguá to have been subjected to other alien stimuli.

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[33] Morley, 1938, vol. 4, pp. 304–305. Morley makes this point clear: "Beyond these six isolated cases, one each at Tikal, Naachtun, Yaxhá, and Seibal, and two statues in the full-round—a standing one at Palenque and a seated one at Yaxchilán—there are no other known examples of full-front presentation of the human figure in sculpture except those at Piedras Negras, Copán, Quiriguá, and Toniná" (op. cit., p. 305). To this list may be added the unhappy but extremely poorly drawn "captive figure" under the feet of the main personage on Stela 5, Xultun (op. cit., vol. 5, pp. 76e). Some minor architectural ornament—small figures tenoned into façades—was carved in full-round by the Maya, but these pieces seem to have been more common in both north and south than in the Petén and also appear to be associated with architectural styles of the latter half of the initial series period (Thompson, 1945).

The ever-present exuberance of Maya art, manifested in what appears to us superfluous decoration of articles of dress and adornment, filling of background space, the filling, in fact, of every available area with secondary design, again suggests habits of composition acquired in painting, rather than in carving where restraint may as well represent labor-saving as Spartan simplicity of concept. It is not necessary to cite specific examples of this well-known tendency of Maya art. It is manifest in the earliest known examples of this style. (Cf. Morley and Morley, 1938, fig. 2, pls. 1–4; Morley, 1938, vol. 5.)

Details of the human figures re-emphasize the essential differences of the two art styles indicated by the variant patterns of approach and composition. The characteristic profile, apparently a faithful representation of the more common Maya physical type, differs markedly of course from that of the Olmec figures in its receding forehead and chin, thick but not everted lips. Eyes are frequently shown as longitudinal halves of ellipses or ovals rather than full ellipses. Features suggesting those of the profiles of Tres Zapotes-La Venta style, with bulging foreheads and protruding chins, appear rarely. Of particular interest is that when such faces are shown on Maya monuments they seem most often to belong to captive figures or are on heads attached to the main personage's belt (trophy heads?)—that is to say, that the Maya artists may well have recognized and attempted to distinguish between their own and another physical type.[34] The distinction may perhaps be one of realism, not of style. Nonetheless, the differing mode of representing mouth and lips may be a true stylistic difference. As to representation of the body, there appears a definite tendency in Maya art toward stiff awkward poses and disproportion at least until the so-called "Great Period." The champlevé, or cameo-like technique in which the figures are depicted, with angular rather than modeled edges, increases the impression of rigidity that they give.

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[34] Morley, 1938, vol. 5, pls. 93, *b*, 95, *b*, 68, *a*, 103, *c*. See also Lothrop, 1941.

While the variety of apparel shown on the La Venta monuments made general characterizations difficult, some distinctions can be noted. The very typical chin strap shown invariably with headgear is found only on a few Maya figures, and these, as Morley has pointed out, belong without exception to the earliest known carvings of the area (Morley, 1938, vol. 4, p. 304). Plumed ornaments, invariably simple in the La Venta-Tres Zapotes pattern, very early become elaborate in Maya art in accordance with the trend toward exuberance of detail (Spinden, 1913). The long "aprons" or decorated pendant ends of the breechclouts, and the intricately tied huaraches, both typical of Maya dress according to the monuments, are conspicuous by their virtual absence in Olmec art. Other Mayan ornamental details whose absence is significant include such features as the Ceremonial Bar (and the awkward back to back hand position associated with it), and the Mannikin scepter.[35]

Quite as significant as any of the foregoing elements is the absence in the Olmec style of the Serpent motif, sometimes associated with Maya figures in the form of ornaments or appendages of human figures, sometimes used as an independent device. Spinden has brought out the fundamental importance of this theme in Maya art and religion throughout the history of the culture. The complete nonappearance of the motif in the art style of present concern (the reptilean attributes of the Jaguar-monster probably have no relation to the Mayan Plumed Serpent theme) points to considerable theologic and ceremonial difference between the two cultures as well as unlikeness of their art patterns.

The foregoing discussion has been aimed at making clear the essential differences of the two styles of art. Their fundamental independence is very clear. The fact that by going through the corpus of Maya art one may encounter occasional points of similarity does not by any means modify this conclusion. Rather, it tends to reinforce the impression of difference, for such features nearly always stand out as anomalous in their Mayan context. The large jade figurine from Uaxactun (Kidder, 1947, figs. 37, 74, and pp. 47–48), stands out among the materials from that site like the proverbial sore thumb, and that despite the fact that the treatment is not in the purest Olmec tradition, at least, not in that of the La Venta school, as Kidder recognizes (Kidder notes also the inferior quality of the jade, which, however, was of the type used for beads, etc. at La Venta). The occurrence of this derived-Olmec piece in a Tzakol deposit is another link strengthening the view as to contemporaneity of the Tzakol and La Venta horizons.

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[35] For the occurrence of these in Mayan art, cf. Spinden, 1913, passim.

Such pieces represent effects of actual trade or, as has been suggested in the case of the frequency of full-front presentations of the human figure at Piedras Negras, Toniná, Copán, and Quiriguá, diffusion of artistic concepts. Diffusion, i. e., copying of trade pieces, may account for the "Olmec" pendants of the Naranjo figures noted by Lothrop (Lothrop, 1941), or such carvings may be deliberate attempts on the part of Maya artists to modify traditional patterns for the purpose of representing foreign personages or dieties. Such "foreign" personages include, along with the un-Maya captive figures already mentioned, the figure of Stela 5 at Uaxactum, shown with a "liberty cap," obsidian-edged sword, and possibly a spearthrower (Morley, 1938, vol. 5, pl. 60b), and perhaps the bearded personage of Stela 27 at Yaxchilán (ibid., pl. 103c). These diffused elements, or copied attributes, whichever they may be, cannot be used to link the two strains of art, for they represent secondary, not fundamental connections.

The topic of the relationship of the mask panels has been left until last deliberately, for this motif seems to be connected in the two art styles, unlike general treatments, and the other themes. Spinden, in his discussion of the Mayan mask panel, sought to derive it from a reptilian theme (Spinden, 1913). However, the addition of the E–VII sub masks to the series indicates two early themes, or two strains of ancestry of the mask panel: one, from the poorly preserved masks 1 to 8, apparently representing reptiles or monsters; the other, from masks 9 to 18, a jaguarlike being with some reptilian attributes, very similar in type to the Olmec Jaguar-monster. The latter form seems to have contributed both more frequently and more heavily to later Maya mask panels than its companion form, the reptilian features which Spinden has noted having been added apparently in a process of secondary elaboration. There are several facts which point to a derivation of the E–VII sub, and later Maya mask panels from the Tres Zapotes-La Venta variety: the essentially un-Maya style of the E–VII sub panels, the earlier appearance of this motif in the Olmec style; and the obvious connection between the two themes as manifested in a series of arbitrary details.

The un-Maya appearance of the E–VIII sub mask panels is not expressed in so many words in the appraisals by Ricketson and by Morley, but is certainly implied in the former's statement that of the mask panels from the Maya area "the Uaxactun examples appear the most primitive and vigorous, showing both simplicity and strength without trace of either degeneration or over-elaboration" (Ricketson and Ricketson, 1937, p. 88) as well as in Morley's opinion that "they (the Uaxactun mask panels) are so simple and undeveloped as almost to suggest a proto-Maya origin, as though the esthetic complex we now call Maya art was only just coming into being when they were molded" (Morley, 1938, vol. 4, p. 316). Simplicity is not a characteristic even of early Maya art—witness the Leyden Plate—this feature alone argues strongly against the Maya source of these masks. When part by part comparison shows the occurrence of rectangular outline (all masks), plumed "eyebrows" (masks 10 (?), 11, 12, 13, 16), strongly out-curved upper fangs (masks 9, 10, 11, 12, 13, 16, 17, 18), forked tongues (masks 1–8, 11, 12, 13, 16), feather head ornaments (similar to those of the La Venta Monument 6), and the main element of the "parts above the mouth" of the "reptilian" masks (1 to 8) is identical with the specialized type of mouth portrayed on the Olmec masks, it is evident that the two patterns are intimately related (Ricketson and Ricketson, 1937, pp. 76–89, figs. 39–50). Finally, the prior appearance of this mask in full-fledged form at Tres Zapotes argues very strongly for the immediate source of the pattern in that culture.

Comparisons of art of the Olmec with that of the Maya has brought out a series of significant findings. It emphasizes, first of all, the distinctness of the two art styles, and by implication, of their respective cultural matrices. Second, it indicates that this distinctiveness was a condition of long standing. And finally, it points out the occurrence of a phenomena expectable enough under the postulated condition of two neighboring distinct culture patterns: that of frequent borrowing of traits by both cultures, without either having been completely dominated by, or becoming culturally dependent on the other. That is, on the Lower Tres Zapotes horizon there was strong early Maya (Mamom, and later Chicanel) influence on ceramics, whereas the present evidence indicates the diffusion of the mask panel theme was in the opposite direction. At a later time, apparently in the Middle Tres Zapotes (La Venta) time level, full-front representations of the human figure seem to have been carried to certain of the nearest Maya centers. Maya influences in art at this period are difficult to determine as yet, but the X-element may well be one, and in other aspects of culture may have been still stronger. If our temporal allocation of the Stone Coffer at Tres Zapotes is correct, Maya art very markedly influenced that of the Tres Zapotes-La Venta pattern in its later phases. In other words, the analysis and comparison of Olmec very plainly repeats the evidence of the ceramic column and the clue offered by the 7th Cycle date as to the antiquity and distinctiveness of this culture.

THE MAYA AREA: THE GUATEMALA HIGHLAND

But few objects referable stylistically to Olmec sources have been reported from the Guatemala highlands. A few small carved jades, which might easily have been carried far from their place of manufacture, have been published.[36] In addition, there are a series of crude human figures in the full-round, which Lothrop (Lothrop, 1926 b, pp. 163 ff., figs. 53–55) describes as having . . . "fat bodies, thick short necks, large heads . . . The faces are heavy and coarse, and the features are usually indicated by incised lines. The legs often curve around the base of the barrellike body, and are parallel with the ground, while the arms are clasped against the sides with the elbows bent." These sculptures occur chiefly (?) at Kaminaljuyú, along with carvings much more typical Mayan in type. Their temporal position has not been ascertained as yet. In any case it is chiefly in their massiveness and simplicity (which seems to be a part of their crudeness rather than a feature of artistic chastity) that they resemble Olmec sculpture. There may perhaps be a connection, but it would seem to be a most tenuous one, and one belonging either to a very early developmental horizon, or else to a late degenerate one.

In ceramics, Olmec motifs are very rare also. However, I would class the incensario shown as figure 201, *h*, of the report on Kaminaljuyú as strongly Olmec in the representation of the human face modeled on it. It must be added, however, that this specimen appears more closely akin, stylistically, to the Olmecan type incensarios of the early periods at Monte Albán than to any type from Olmec territory proper.

PACIFIC COAST OF CHIAPAS, GUATEMALA, AND EL SALVADOR

Data on the sculptured art of this region has been summarized by Richardson (Richardson, 1940) and augmented more recently by Thompson (Thompson, 1943 b). There are several varieties of art styles represented, which have been lumped together by the two writers just mentioned chiefly on the basis of their being "non-Mayan." Some are surely late, like the well-known Eight Deer Aztec stela at El Baul (Waterman, 1924). There are, however, throughout this region, carvings of the type just referred to from Kaminaljuyú: crude massive figures in the full-round, that vaguely suggest Olmec affinities, but show no specific details of Olmec art, at least, Olmec art of the Classic variety. There are also "colossal heads" carved from large boulders, but some of these, like the head of El Baul (Waterman, 1924, fig. 4), are about as unlike the Olmec large stone heads as two treatments of the same theme can possibly be. The crudity and downright lack of artistic merit of other examples appear clearly in Richardson's illustrations of them (Richardson, 1940, pl. XVIII, *a*, *b*). It must remain a matter of opinion, until further evidence pro or con is brought to light, whether so generalized a concept as that of carving large heads of stone is of as much significance for establishing cultural connections as stylistic details and methods of treatment. My own opinion is, as in the case of the crude figures from Kaminaljuyú, that if there was a connection it must have been an extremely tenuous one.

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[36] Cf. Lothrop, 1936, p. 95, fig. 105. The head and face of this piece are good Olmec in type, but the arms and legs, especially in profile, are thin and spidery (the arms are in low relief rather than being boldly modeled), and thus the specimen is somewhat aberrant. The same may be said for the specimen figured by Kidder, 1942 a, p. 37, fig. 40, *d*. The figure has a strongly carved head with a mouth ornament covering the mouth, and the body represented by three coils (?), which may represent serpent coils surmounted by a human head (in which case the "mouth ornament" would be a reptilian forked tongue), or a burial bundle. In other words, it, too, varies considerably from Olmec art of the Classic variety.

At the same time, it is almost impossible to deny that Olmec art has made itself felt in this region at some period, however, on the basis of the figure carved in low relief on a large boulder near the site of San Isidro Piedra Parada which Thompson has recently described (Thompson, 1943 a, pp. 104, 111–a). The figure is clearly a personage wearing a jaguar mask that would not look very out of place on a monument at La Venta itself. The mask has the typical recurved protruding upper lip, drawn back in a snarl, and the person wears a high complicated headdress held on with a chin strap. He is shown as kneeling in a fluid moving posture—not at all static—about to strike with some sort of a curved weapon. The figure is simply clothed: aside from some pendants about the neck which may depend from the headdress, there seem to be only a belt and arm, wrist, leg, and ankle bands depicted. The body itself is less well drawn than those of the Jaguar-beings at La Venta, but still is infinitely better formed than those of the crude figures in the round of the nearby region, and nowhere near as rigid and static as those of the Santa Lucia Cozumalhuapa type.[37] It may be that further investigations along the Pacific coast will bring to light an Olmec center or centers there, which will make it easier to explain the crude types of figures as late limitations by neighboring groups less skillful in sculpturing.

Another point worth discussing in connection with this figure is Thompson's assigning of it to relief carvings of the Izapa type (cf. Stirling, 1943 a, pls. 48–62). I am unable to see any close similarity between Olmec sculpture and that of Izapa however. The florid overloaded patterns of the latter, with their abundant curvilinear fillers and adornments, are quite foreign to the severe simplicity of Olmec composition.[38] The themes themselves, moreover—trees and plants, as well as innumerable varieties of birds and animals, and but few clearly portrayed human beings, likewise differ fundamentally. I am convinced of the correctness of Stirling's opinion, which is that these Izapa carvings represent a completely distinct art style, possibly generically related to both Mayan and Olmec carving, but specialized a long way from either along its own peculiar lines (1943 a, p. 73).

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[37] Thompson (1943 a), assigns this group of carving to the "initial series period," adding that "in all probability they continued into the transition to the Mexican period" (p. 119). These stelae may represent another school of Mesoamerican art—for the likewise seem to differ from anything else—the angular ill-drawn figures worked into complex and well-balanced compositions seem to be in a class by themselves.

[38] Stirling (1943 a), has pointed out that there are several distinct patterns at Izapa, one of which, consisting of rectilinear geometric designs, is completely different from other southern Mexican styles. The present discussion refers of course to the stelae with representative designs.

One very interesting early vessel from Shook's collection of Miraflores material from Finca Arizona is decorated with an unmistakable derivative of the Jaguar-monster motif. This is the Dark Red-on-Red cylindrical vessel shown as figure 6, *d*, of Shook's description of this material.[39] The inverted angular U-shaped form of the typical Jaguar–monster muzzle appears, and over it is a pointed element which is probably the head notch turned wrong end up. Below the mouth is a figure suggesting the monster's bifurcated tongue, considerably exaggerated, and made by an extension of the bordering incised lines. Interrupting the muzzle element is a small, more or less round mouth with stubby squarish teeth and a protruding tongue. It is conceivable that this representation may be a peripheral example of the Jaguar-monster motif, made by people to whom a stylized and not-too-well understood version of the motif had been diffused. The significance of the muzzle form had been lost en route, it would seem, so to make clear that an animal or monster was being represented it was felt necessary to add the small superfluous mouth. Similarly, the tongue became a meaningless double scroll, so a small tongue was modeled in the mouth. If this interpretation is correct—although it may be overdoing the matter to read so much from a single specimen—it would indicate a possible southeastern boundary of Olmec influence during Lower Tres Zapotes times.

THE MAYA AREA: YUCATÁN

There are a few remains from the Yucatán portion of the Maya area which have to be considered, in addition to the occasional find of Olmec jade figurines—not so abundant but that they can be accounted for as trade pieces (see Kidder, 1942 a, pp. 37, 39, *d*, *f*). Andrews has recently assembled data on them, pointing out the principal features which link them as a group, and which, as well, serve to set them apart from any known Maya sculptures (Andrews, 1939; 1941). These distinctive traits referring to representations of human beings are: large bulging foreheads; flat nose with excavated alae; thick coarsely executed lips; body devoid of any clothes or ornaments (except Telantunich Monument 1); body of unnaturally small size; squatting bowlegged posture; strong phallic emphasis (Andrews, 1939, p. 78).

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[39] Shook, 1945. Shook tentatively identified the design as a representation of Tlaloc, since data on Olmec stylistic features were not available at that time.

To this list we may add the following: full-round (most frequent) or front-view representations; central figure in archway (cf. La Venta Altars 2, 3, 4, 5, 6; Stelae 1); and general massiveness of the monuments, all of which, just as in the case of most of Andrews' elements, suggest sculpture of the Olmec type.[40] In general, it appears that the chief stylistic variants of these figures from the previously defined norms—the small sized, illy carved bodies, the postural distortions—suggest decadence of the style in an epoch following its artistic climax. If these carvings can be assigned stylistically to the Olmec, the feature of phallicism and the carved serpent (at Kabah, Andrews, 1939, p. 74) may have been accretions to the complex made long after the La Venta horizon. Andrews has pointed out the possibilities of a placing ranging from the Mexican period to post-Conquest times. As a guess, I would suggest assigning them provisionally, until ceramic studies have made their exact placing possible, to a time level just prior to or just following the earlier Mexican intrusions into Yucatán, accounting for them on the basis of the immigration, perhaps even enslavement, of small groups from the regions west of the Maya country. The occurrence of small enclaves of alien peoples, usually attributed to Toltec and Mexican dislocations, is not uncommon in other parts of southern México and Central America, after all. Such an event may have been linked with the disturbances which led to the abandonment of the Tres Zapotes region at the close of the Upper Period, some time just prior to the Plumbate–Fine Orange diffusion. These Yucatan non-Mayan sculptures would, if these speculations can be substantiated, represent a final decadent phase of the long-lived Olmec art.

I would stress that this hypothesis is at best based on slim evidence, but the fact remains that these Yucatán carvings, illy made and ugly as they are, do have a certain Olmec flavor, and are more readily derived from that art than from any known school of Yucatecan sculpture.

OAXACA

The relationships of Olmec art to that of the earlier horizons of Monte Albán may be dealt with briefly. Several lines of evidence have led to the view summed up by Acosta at the Tuxtla Gutiérrez conference that "Monte Albán fué, si no el centro, sí uno des los grandes centros de diffusión de la cultura o estilo olmeca" (Acosta, J. A., *in* Mayas y Olmecas, pp. 55–56). One of these suggestive factors is that jade figurines clearly belonging to the art style have been found in Oaxaca and even farther west in Guerrero, although never in a cultural context.[40] These sporadically occurring objects, of course, can be accounted for in terms of trade relationships, perhaps dating back to early levels of the Olmec culture to which they belong, or perhaps in some cases the figurines were treasured, and exchanged long after the disappearance of the culture by which they were made. The jade figurines of Monte Albán type have been well defined on the basis of Caso's finds, and the earliest of them are stylistically and technically quite different from anything referable to Olmec style (Caso, 1938, figs. 6–13). Another suggested relationship depends on a supposed stylistic affinity of the "Danzante" figures to the art style. This appraisal can be shown to be fallacious. While the Danzante figures apparently represent a physical type similar to that of the makers, or rather the models, of the La Venta-Tres Zapotes sculptures—heavy-featured, thick-lipped, with prominent foreheads and chins—they do so in a completely different way. The treatment of the mouth is one of the clearest points of difference. In the Danzantes, a thick-lipped mouth is represented most often by a double line that goes clear around the mouth, that is, with no tapering of the lips to the corners, giving the effect of the type of mouth painted on blackface minstrels. This form, completely nonrealistic, does not appear in any profile at La Venta. Significant too is the fact that chin straps are not shown on Danzante headdresses. The representations of the bodies, out of proportion, often distorted, with the limbs structureless and illy drawn, are completely opposed to the norms of Olmec art. When to this list of differences we add that of phallicism, frequent in the Monte Albán figures, and note both the absence of the miscellaneous decorative elements common in Olmec art and the fact that the Danzantes are not, properly speaking, carvings in relief, but rather drawings incised on slabs of stone, the distinctness of the two styles is obvious.

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[40] From the drawing, the figures of Monument 1, Telantunich, seem to have long angular ears, and those of Monument 3, and the Kabah "Mujer de la culebra" figure seem to have membranous lips directly below the nose—both traits very characteristic of Tres Zapotes—La Venta art.

Although the stone carving and work in jade at Monte Albán seems to have been based on quite different artistic tenets throughout their history, it is noteworthy that in Monte Albán I and II, ceramic forms—chiefly effigy vessels—occur that suggest very strongly the Olmec treatment. Both human faces and Jaguar-monsters (or beings closely resembling them) are to be seen in these effigy pots. Caso and Covarrubias have figured a number of these pieces, and both these authors have suggested a line of descent of the Zapotecan Cocijo from a Jaguar-monster of Olmec type.[41] It is not clear at present just what proportion of the early Monte Albán effigy forms are represented by such Olmec-like pieces; apparently they are somewhat rare, and if that is true, may be indicative of a strain of influence from an early (pre-La Venta, i. e., Lower Tres Zapotes) Olmec center. On the other hand, it may be that both cultures, that of the Olmec and that of Monte Albán as well shared a few artistic and religious concepts from earliest times. In the course of development of the vigorous culture at Monte Albán, this strain became a minor one, partly dying out, and partly being submerged by the trend away from simplicity toward exuberance of detail that led to the effigy forms nearly concealed amid the welter of applique ornament that are so typical of the Classic Period ceramics of Monte Albán. Whatever the source of this Olmec or Olmec-like strain of Monte Albán art, whether it represents effect of Olmec influence, either direct or transmitted, at an early time, or whether it was a common heritage of the two cultures from some yet undiscovered ancestor, it was soon revamped and modified to fit local artistic tastes. In brief, Monte Albán culture cannot be reckoned basically Olmecan, nor can it be derived from an Olmec source.

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[40] Covarrubias has published a number of these; see Covarrubias, 1944 a.

[41] Caso, 1928, fig. 6; Caso, 1938, fig. 44; Caso, *in* Mayas y Olmecas, pp. 43 ff., Caso 1947, Lam. 14, 15; Covarrubias, *in* Mayas y Olmecas, p. 49; Covarrubias, 1947, p. 182. See also Linné, 1938 a, pls. 25, 26, 27. These Cocijo figures are said to be most typically from Monte Albán III, although a simpler representation of the deity has been assigned by Caso to Monte Albán II (Caso, 1935, p. 27).

THE CENTRAL MEXICAN HIGHLAND

Comparisons with the Central Mexican Highland pose more problems than they settle. To begin with, we have to do with a series of cultures whose successions have been worked out in meticulous detail, chiefly by Vaillant, and whose ceramics throughout the Middle Culture epoch differ thoroughly and consistently from that of the Olmec region (on the Lower and Middle Tres Zapotes horizons). The early use of simple painting in the Highland, greater variety of slip colors, and numbers of other points, set the Valley of México Middle Cultures off as possessed of a ceramic tradition quite distinct from that of the Olmec, who seem to have participated in a pattern that clung to the coastal lowlands as far southeast as Honduras. Nonetheless, Vaillant suggested a possible Veracruz source for his Type A figurines from the Middle Zacatenco and El Arbolillo II horizons, which he saw as alien to the local pattern (Vaillant, 1930, p. 120; 1935 b, p. 200; 1941, p. 35). In my opinion, the resemblance between this type and the Olmec I–A–1 and I–A–2 types, while it exists beyond question, is not very strong. True enough, the method of constructing mouth and nose—from a fillet of clay sunk in a slot—is a persistent Olmec figurine technique. However, the facial outlines differ: those of the Highland Type A are broad at the middle, with pointed chins, rather than being square-jowled as were the I–A–1 and I–A–2 forms. More important, the central punctations of the eyes seem to appear in only about half of the A examples, and the punctations at nose and mouth, a critical feature of the early Olmec types, are absent. In other words, the Highland Type A figurines are on the evolutionary or developmental level of the modified I–A forms (I–A–3, and hybrids influenced by Style II), of Middle Tres Zapotes. If they are lineally related, it must follow that the diffusion of the type from southern Veracruz was a long slow process, during which the original type suffered some important changes.

The history of the introduction of the Highland Type A figurine is overshadowed by a more recent series of discoveries at Tlatilco. Here, in a context of typical but unusually well-preserved lot of Zacatenco ceramics and figurines, were found a number of figurines of unmistakable Olmec type—one of serpentine, the others of clay (the clay specimens are of the III–A–1 and III–A–2 types of the present classification). With them, to emphasize their significance, and to rule out the possibility of regarding them casually as stray imports, are pottery traits as well—rocker stamping, typical Olmec motifs incised on vessels (we have no precisely comparable pieces from La Venta or Tres Zapotes, since so few complete vessels were collected from early Lower and Middle horizons).[42] The pottery traits, like the Olmec figurines, stand out in vivid contrast to the local Middle Zacatenco patterns. A full description of the materials must await Covarrubias' report on his excavations, but it is clear that there was on that Early Middle Culture horizon a very pronounced strain of Olmec influence.

To appraise the import of this influence, we must consider the possibilities as regards source. Logically, of course, the art style and at least part of its associated ceramic pattern might either have originated in the Valley of México, or been brought in from without. The alien appearance of both ceramic traits and the figurine types (III–A–1 and III–A–2), while it is a subjective appraisal and not real evidence, at least until the collections from Tlatilco have been fully described, weighs against a hypothesis of local origin. That is, the main body of the ceramic materials are those of radically different genre, and are wares and forms which can be traced from early to later times in the Valley of México, and which therefore would seem to represent the basic local pottery tradition. Perhaps more significant is the fact that peccaries, round-bellied fish of the kind known today as "mojarra," and other animal forms represented by effigies seem to reflect tropical fauna, not Highland forms. What hints there are available point to intrusion from the coast. This Tlatilco material, like the reliefs of Chalcocingo, in Morelos, suggests the occurrence of Olmec outposts in, or at least near the Highland—sites of which we have no knowledge at present.

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[42] Covarrubias (1943) has described and illustrated a part of this material. Through his courtesy I was permitted to examine an extensive series of photographs and drawings of the more recent portions of his very significant Tlatilco collection.

From the point of view of relative chronology, the Tlatilco-Olmec material which stylistically is surely referable to the La Venta-Middle Tres Zapotes horizon hints that one side or the other of our time scale is wrong. That is to say, either the beginning of La Venta-Middle Tres Zapotes must be put two or three centuries, at least, farther back, or we must assume that Olmec art actually attained its peak in the Lower Tres Zapotes period—a suggestion for which there is little evidence as yet, even though we have only a relatively small sample of ceramics from that horizon. To revise the dates of the Valley Archaic upward in time scarcely seems reasonable, as an alternative. It is worth considering whether or not both the La Venta period, and the Mayan Tzakol period with which it seems to be roughly contemporary, might not have earlier beginnings than present estimates usually allow for. There is no necessity to assume that the "Archaic" or Middle Culture horizons of the Valley of México were perforce contemporary with the culture strata of generally similar content to the south and southeast of them. On the Mesoamerican map, the Valley of México is more nearly peripherally than centrally located; it hardly need be thought surprising if there should prove to have been considerable time lag in the early phases of culture growth and spread. This suggestion is advanced with caution, however, for it may be that we shall eventually find that Olmec art in plastic media especially attained its full bloom stylistically in the Lower Tres Zapotes period.

That Olmec influence was of some duration is evidenced by the fact of the very obvious similarity of the large III–A–2 figurines found in Gualupita II deposits (Vaillant and Vaillant, 1934, pp. 50, 119, and figs. 14, 15). These, like the Tlatilco specimens, relate to the Classic phase of Olmec art, in other words, to the La Venta-Middle Tres Zapotes horizon, and would indicate, if our Olmec time scale is to be modified, that this must have been a fairly long period.

Whether there is any significance to the fact that there seem to be more III–A figurines from the Highland deposits than from the presumed Olmec homeland in southern Veracruz and western Tabasco is not clear. I believe not; were preservation conditions better in the lowland, and had we found more burials of personages of importance, we might well have more of these pieces. No more typical and well-made III–A–2 specimen could be wanted than the one reportedly picked up at La Venta on a hunting trip (Joyce and Knox, 1931). There is the possibility that the highlanders went to more pains in copying these figurines, and made them larger, because jade ones were harder for them to come by. Something of this sort must have been the cause of the abundance of Olmec stylistic forms in ceramics rather than in jade or monumental sculpture in Oaxaca also.

CONCLUSIONS AS TO AREAL RELATIONSHIPS

The foregoing paragraphs have stated the case for an interpretation of Olmec art as a unique development of a single southern Mexican culture that cannot be considered a byproduct or peripheral manifestation of Mayan civilization. According to this view, the Olmec were one of several Mesoamerican cultural centers, each of which, on diverging from some ancient ancestral pattern or patterns, developed along its own special lines. The achievements of each of these centers influenced and stimulated the others to varying degrees, but a fair share of their respective cultural developments were independently produced. In addition to this general interpretation, derived from an appraisal of art styles, various points of contact between the Olmec and their neighbors have been noted. In addition to finds of obvious trade pieces, we have seen that Olmec motifs and stylistic traits appear here and there in specimens made outside the Olmec area. It is interesting to note that such indications of influence seem to be more extensive on the Lower Tres Zapotes time horizon than on that of La Venta. That is, traces of Olmec style can be seen in the Petén, in Monte Albán I, and faintly in Miraflores Period remains. Of these, the most intimate relationships seem to exist with the early periods of the Petén. The very close ceramic relationships of the two areas support this view. The relationships with early Oaxacan culture may have been indirect—secondhand, so to speak—although as yet we have no knowledge of an intervening culture that could have served as a middleman in the transfer. The scant traces of Olmec influence in Miraflores may conceivably have filtered into Guatemala by way of Oaxaca. During the La Venta period we find Olmecan jade trade pieces in the Maya lowland, and stylistic influence on certain lowland Maya monuments, but little trace of strong contact either in Oaxaca or in highland Guatemala (the view here is that the Monte Albán II effigy vessels in Olmec style were carryovers from the preceding period). This suggestion of relative isolation repeats the interpretation of the ceramic pattern during the same period. Only in the Central Highland is there evidence of strong Olmec influence of La Venta period, and here it is so very pronounced that we are led to suspect that there must have been an actual Olmec outpost or colony not far from the Valley of México. It has been suggested that there may have been others, perhaps on the Pacific coast, but evidence is far too scanty for us to be sure. In Upper Tres Zapotes times, Olmec art was submerged in the influx of cultural influences previously unfelt by the culture—it became modified almost beyond recognition. A decadent strain may perhaps have persisted for a time in an outpost in Yucatán, but we can only guess as yet how it got there and how long it lasted.

To return for a moment to the problem of greater extension of Olmec influence during the Lower Tres Zapotes period, an alternative hypothesis should not be overlooked. Instead of attributing the Olmec stylistic traits in Monte Albán and Miraflores to actual Olmec influence, they might be viewed as survivals of a strain of religious concepts and artistic treatments from a basic Mesoamerican culture.[43] In accordance with such a view, certain elements which we have considered "Olmec" would have been part of a common cultural heritage. The Jaguar-monster concept, with his peculiar assemblage of feline, avian, and reptilian attributes, may have been the center of an ancient widespread Mesoamerican cult, just as the Feathered Serpent came to be much later on. This would not write off Olmec culture as an important Mesoamerican focus, but would mean that the Olmec not only retained, but developed even further the ancient themes while their neighbors discarded them in favor of newer patterns. If future discoveries suggest that this was the case, the possibility should be considered that the hypothetical parent culture may have extended deep into ancient South America. It might not be pure coincidence that feline monsters were the central themes of religion and art of this area and recur, albeit in altered form, on the Chavin horizon in the Andean region.

SUMMARY

The present study has ranged over a variety of topics, from descriptions of the site of La Venta, its pottery and figurine types, its artistic manifestations in jade and huge stone monuments, to a series of comparisons over a good part of Mesoamerica. It seems well, therefore, to summarize the principal conclusions arrived at during the lengthy, and I fear occasionally involved discussion.

(1) The site of La Venta itself appears to have been a major ceremonial center occupied for a rather long period by a small resident group, and presumably maintained by the population of the entire district round about. If this interpretation of the extensive constructions accompanied by small, if deep, occupational deposits is correct, it of course implies a highly developed and very stable sociopolitical organization, and strongly centralized authority, as well as an elaborate formulation of religious concepts and ritual.

(2) On the basis of its ceramic remains, the site appears closely linked temporally to the Middle horizon of Tres Zapotes, and thereby may be placed as approximately contemporary with the Tzakol Period of the Maya region.

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[43] I except the Olmec traits in the Petén—the E–VII sub mask panels, chiefly, because the ceramic patterns of early Petén and early Olmec indicate a much closer cultural relationship than that between Olmec and the people of the other areas.

(3) It is clear that the La Venta horizon is a segment of the remains of a particular culture, that designated here "Olmec," whose chief locale was in a limited region of southern Veracruz and western Tabasco. The point here is that we have to do with an Olmec culture, whose development can be traced through a series of periods, rather than a nebulous complex, involving certain stylistic traits as the hypothetical Q-complex involves ceramic elements. The Olmec culture was developed locally out of basic elements inherited from some still unfound parent Mesoamerican culture. During its long history, traceable so far from Lower Tres Zapotes, through La Venta, to Upper Tres Zapotes and the slightly later Catemaco-Santiago Tuxtla horizon, the culture was affected in varying degrees by stimuli from contemporary Mesoamerican foci, and in turn affected them.

(4) Both ceramics and art style indicate that on the La Venta horizon, the artistic apogee of the culture, it was somehow isolated, particularly from the wave of traits characteristic of Teotihuacán III that appear to have swept rapidly and spectacularly through the highland, between the Valley of México and Guatemala, and into the lowland Petén.

(5) During the La Venta Period, the art of sculpture in the Olmec tradition reached its zenith. Stylistically, the art seems to have been crystallizing during the preceding Lower Tres Zapotes Period; on the La Venta horizon it attained its maximum expression. It was an art deriving from sculpture in the round, not from painting or engraving, and thus was independent of Mayan sources for its inception. This fact corroborates the opinion as to the autonomy of Olmec culture as a whole (although that culture was essentially one of the heirs of one or more of the early patterns from which the various Mesoamerican foci sprang).

(6) Despite the relative isolation during the La Venta Period (relative in terms of the widespread Teotihuacán III influences affecting other cultures at the time), its art products spread far, and influenced the artistic patterns of neighboring centers, for example, its traces appear in various Mayan carvings.

(7) Evidence is accumulating that there may have been an Olmec outpost in the Mexican Central Highland, during the La Venta Period. If this is true, it means that a revision of chronology is in order, either compressing the already reduced Valley of México time scale, or setting the beginning of La Venta, and with it, that of Tzakol, back some centuries earlier than these periods are now dated in terms of Christian chronology. It is possible of course that Olmec art on the Lower Tres Zapotes Period may have been more nearly perfected than we now believe, in which case the present relative chronologies would

require no adjusting. More data from Lower Tres Zapotes are needed to resolve this point.

(8) There is evidence that on an earlier level, that of Lower Tres Zapotes, Olmec art may have contributed importantly to the artistic patterns of many neighboring centers: to the Chicanel phase in the Petén, to Miraflores in highland Guatemala, to Monte Albán I. However, these manifestations in Oaxaca and highland Guatemala of objects reminiscent of Olmec art can be interpreted another way: the widespread occurrences on an early horizon may represent a strain of art (and of technology and religious concept as well) present in the basic ancestral pattern of Mesoamerican culture, that persisted and was specialized and perfected into the Olmec art of the La Venta horizon. The resolution of this problem depends on the excavation and meticulous study of Middle Culture remains throughout the area, and of the still earlier remains that will eventually be found.

APPENDIX

TECHNOLOGICAL ANALYSES

By Anna O. Shepard

UPPER TRES ZAPOTES FINE PASTE SHERDS

These notes are based on a sample of 40 sherds including a number of well-preserved polychromes in cream, buff, and orange finish, and some less well-preserved fragments, both oxidized and reduced. All sherds were examined with the binocular miscroscope and 14 were thin-sectioned. Thermal tests were made of a number, and three samples of black paint were tested microchemically for iron and manganese.

Classification.—The sherds were first classified with respect to color, which was considered in relation to firing method, paste composition, and finish. With respect to firing, the sherds can be divided into two groups: the oxidized, which include a range from cream to orange and brown; and the unoxidized or reduced, the grays. This division is based on surface color. Many of the sherds classed as oxidized have gray cores showing that the process of oxidization was incomplete.

The oxidized pastes can also be divided into two classes defined by color of the clay, buff-firing and red-firing. This terminology is borrowed from modern ceramics. The clay classed as red-firing is usually referred to as orange in descriptions of Fine Paste ware. Each class has a color range that may be caused by minor differences in composition, variable firing or a combination of the two, but the distinction between the two classes is due to paste composition and not firing because the color difference persists when the sherds are refired under standard conditions. These clays did not necessarily come from different localities. They could, in fact, have come from different strata in the same bed, but it is plain that the potters were familiar with the firing behavior of the two varieties of clay because they adapted their finishing techniques to them. The sample is rather small for comparison of the properties of the red and buff pastes, but it appears that the reds were less often fully oxidized, and also they appear more dense than the buffs.

Classed by surface finish, the sherds again fall into two major groups, those with a slip of contrasting color and those which are either unslipped or self-slipped. The classification is based on examination of fresh cross fracture with a binocular microscope (magnification 48×). The contrasting slips are usually whitish to cream white. Occasionally buff or orange slips occur on the darker pastes. The light slips are very easily detected by color contrast, and, in the sample examined, they were found only on red-firing paste. No distinct coat could be detected on the buff pastes. The potters must have learned from experience that the buff clay would fire to a satisfactory color and did not require a slip. An interesting feature of some of the buff pastes is a color variation depending on direction of fractures. The color is distinctly deeper in cross fracture than in a break parallel to the surface. Also when the edge is worn it appears lighter, giving a false appearance of slip. This color may be due to orientation of platy material in the paste. The one buff slip on a red-firing paste is practically identical in color to the buff pastes, and, although not checked optically, it is not improbable that the buff clay was occasionally used as a slip on the red-firing clay. There are a few red-firing pastes which, like the buff, have no detectable slip. It is difficult to determine even under high magnification whether the surfaces of this class (both red- and buff-firing) were merely well smoothed or had a coating of the same clay as the body, and it is pointless to guess. The important distinction is between sherds with contrasting slip and those lacking a recognizable coat.

Only a few color readings were taken because of the small size of the sample and the weathered condition of many of the sherds. The readings are in the Munsell system and are for fully oxidized pastes.

The color and finish of the oxidized sherds can be summarized as follows:

- With contrasting slip:
  - Paste: Red-firing (2.5YR 5/6, 5YR 5.5/6)
    - Slip: Cream-white (10YR 8/4, 10YR 9/2)
      - Buff (7.5YR 7/6, 10YR 7/3)
      - Orange (10YR 6/6)
- Without contrasting slip:
  - Paste: Buff-firing (7.5YR 7/5; surface 7.5YR 7.5/5)
    - Red-firing (5YR 5.5/6; surface 5YR 6/6)

Some sherds of all types have painted decoration, but the sample was too small to determine whether or not there is any correlation between painting technique, design, and finish. The smudged or unoxidized sherds are described below under thermal tests.

Thermal tests.—Chips from 13 sherds were refired in air in an electric resistance furnace to determine: *a*, how paste and finish of gray and oxidized sherds compare; *b*, whether buff pastes are a firing variant of the red; *c*, whether white slips are a firing variant of the cream-white; *d*, whether certain of the black paints are carbonaceous.

Color variations in a paste may be due to differences in either firing temperature or firing atmosphere or a combination of the two. If the clay is incompletely oxidized (that is, if organic matter originally present in the clay is not burned out), reduced, or smudged, the normal colors of the fired clay will be masked and it will be gray brown, gray, or black, depending upon intensity of reduction and amount of smudging. The percentage of iron in the clay will also affect color. The lower oxides are black, and they are not fully converted to the red ferric oxide until all of the carbonaceous matter is burned out. Although the color of a fully oxidized clay is affected by a great many factors, the chief colorant is iron oxide. The depth of color imparted by iron oxide is affected by its particle size and relation to other constituents of the clay, as well as by its percentage. When a clay is fired in an oxidizing atmosphere, the color due to iron oxide increases in depth and clearness with temperature up to the point of incipient vitrification. The color then becomes less clear and gradually changes to some value of brown as the ferric oxide reacts with other constituents.

It is often impossible to tell whether the color differences in sherds are due to firing, composition of the clay, or to a combination of these factors. If, however, sherds are fully oxidized and then carried to a temperature above the original firing but below the vitrification point, color differences will indicate differences in composition. Oxidation should be carried out at a relatively low temperature because firing shrinkage and incipient vitrification tend to trap carbon and increase the difficulty of oxidation or even prevent it.

The Tres Zapotes fragments were brought to a temperature of 750° C. in 15 minutes, cooled, examined, returned to the furnace and again brought to 750° (held between 650° and 750° for 5 minutes), cooled, rechecked for oxidation, returned and heated to 900° C. (held above 800° for 6 minutes). At the low temperature the oxidized colors—buffs and oranges—were unchanged. The whitish slip was also unchanged. The gray cores of red-firing pastes were fully oxidized. The gray sherds were variously affected depending upon the density of the paste. The paste of those most readily oxidized changed to red or buff and some of the surfaces showed a cream slip. The more dense pastes, some of which may have developed incipient vitrification, resisted oxidation and remained gray or changed to brown.

The firing at 900° C. was high enough to show whether or not there is a difference in composition between the buff- and red-firing pastes, and it also completed the oxidation of all except the vitrified gray sherds. The buff chips were practically unchanged in color and the clay clearly differs in composition from that of the orange sherds.

Brown pastes, on the other hand, are firing variants of the orange. The classification of surface finish was also supported by the firing tests. One distinct whitish slip was recognized, however. It did not change perceptibly in color on refiring, and examination of powder in oil mount with the petrographic microscope showed that it is distinct from the cream slip.

The hardness of both cream slip and buff unslipped or self-slipped surfaces is between 3 and 4 (Mohs' scale) for well-preserved sherds, which may represent the better-fired vessels. Hardness is not increased by refiring sherds to 950° C. The whitish slip is slightly harder than the cream.

Refiring shows that the gray sherds are variable in composition. They include both red- and buff-firing pastes, unslipped or self-slipped and cream-slipped surfaces; in other words, their one common feature is that they are unoxidized. The intensity of smudging varies, and, in view of the variability of surface finish, it is not improbable that some of the gray sherds in the sample were accidentally rather than intentionally smudged. Clays differing in color, perhaps from several strata of the same deposit, might be used for smudged ware, but it is less likely that different finishing techniques would be employed if the ware was being made by one group of potters, because the color effects obtained with different slips would be masked.

Paste composition.—The Fine Paste ware belongs to a class of pottery distinguished by a texture that suggests an untempered clay. The minerals that occur, as well as their fineness and sparseness, are characteristic of the natural inclusions of clay. But despite the high degree of probability that these pastes are untempered, we do not have proof that they are; potters could have added fine silt in small amounts and obtained the same texture. Consequently until these pastes are compared with the clays of the region, it is advisable to designate them simply as fine pastes or fine silty pastes.

The fineness of texture of these pastes greatly increases the difficulty of identifying inclusions with the binocular microscope. The principle inclusions detected with a magnification of 96× are quartz and very fine scaley white mica. Some pastes are dense and contain relatively little quartz but an abundance of mica, others have considerable fine quartz but mica is not conspicuous. Lumps of hematite or ferruginous clay and brown or gray earthy particles, sometimes silty, occur sporadically, the former principally in the silty clay, the latter in the dense clay. Calcareous inclusions were not noted but one exceptional paste contained numerous fine holes that may have been caused by the solution of a calcareous temper.

Petrographic thin sections confirmed the difference between the dense and silty pastes. Quartz grains in the dense paste are angular, sparse, and, except for stray grains, are under 0.08 mm. in diameter, and the majority of grains are much finer. Rare inclusions are: quartzite in the coarser grain size; feldspar in the range of the finer quartz grains; and hornblende and pyroxene in the very fine. The minute plates of mica are abundant and characteristic. The majority of grains of the silty paste are between 0.24 and 0.05 mm.; feldspar grains are more common than in the dense paste, and the heavy minerals include tourmaline as well as hornblende and pyroxene. In the small sample studied, the dense micaceous paste has the red-firing clay, the silty one the buff-firing. This correlation of texture and mineralogical composition with clay type should be checked in a larger sample of sherds, and its significance with respect to the origin of the pottery studied.

A peculiarity of both pastes is the presence of scattered coarse elongated pores roughly equidimensional in section. Their form and the presence of fine striations on the wall of some pores suggest that they are moulds produced by some organic matter that burned out in firing rather than air pockets left in the paste. The pores are much too fine to have been formed by the inclusion of a grass but could have been produced by some fine threadlike plant form, possibly an algae. It is uncertain whether the material was introduced accidentally or intentionally. The pores are present in both the dense and the silty pastes but are more common in the former.

Composition of the black paint.—Only mineral pigments occur on the sample studied. Three samples of brown black paint tested microchemically gave strong reactions for iron and moderate reactions for manganese. The vast majority of Mesoamerican blackish paints that have been tested to date have been of the iron-manganese class.

MIDDLE TRES ZAPOTES FINE PASTE SHERDS

The sample of 24 Middle Tres Zapotes sherds submitted for study were all badly weathered and their surfaces were powdery. It is noteworthy that, except for six black sherds, the pastes were all oxidized; gray cores were absent. Most of the clays are red-firing though a buff-firing one is also represented. Colors, which are comparable to those of the Upper phase, become slightly clearer on refiring to 950° C., but the hardness is not increased.

Comparison of these pastes with those of the later phase is based entirely on examination with the binocular microscope. All of the Middle phase pastes are silty, the dense micaceous one of the Upper phase being unrepresented. Also the silt of the two phases does not appear identical. The earlier paste is more porous, slightly finer in texture and less homogeneous in mineralogical composition. Both dark-gray and opaque-white grains are present in addition to the quartz. A peculiarity not noted in the Upper Tres Zapotes sample is the occurrence of calcareous fragments of organic origin. They are probably foraminifera and resemble globigerina. They are not numerous and were noted in only half of the oxidized sherds.

In addition to the paste described, the Middle Tres Zapotes sample included 11 sherds of a silty texture also classed by Dr. Drucker as fine paste. They are in part comparable in texture to the silty pastes of the late phase but the majority are coarser having a higher percentage of inclusions and coarser average grain size. The texture suggests that the paste may be silt tempered. The sherds are much better preserved than the fine-textured ones of the same lot and include a red unslipped, a white to cream slipped, and a gray ware.

The Middle Tres Zapotes sample was examined primarily to learn whether or not an ash-tempered paste comparable to that of La Venta (see below) occurs. None was found in the sample submitted.

A much larger sample and detailed petrographic analyses would be necessary to establish a consistent difference in the Fine Paste of the two phases. This note is included merely to draw attention to a feature of the earlier pastes that may be significant.

LA VENTA FINE PASTE SHERDS

A sample of 32 Fine Paste sherds from stratigraphic Test 1, Levels 24″–36″, was examined with the binocular microscope. Six of these sherds were thin-sectioned for petrographic analysis, and chips from 12 were refired to test the thermal behavior of the clay. Forms representated in the sample included bowls grooved below the lip on the interior with rims direct, beveled, or angled outward; vessels with slightly restricted orifice and exterior grooving; and a miniature jar. The surfaces are very soft, under 2 (Mohs' scale) and the original finish of most of them is destroyed. Those not eroded include a lustrous black and a thin light-red slip (Munsell reading—2.5YR 4/6). The paste is variable in color but the majority have a wide black zone, which may be a central core but more often occupies the inner half to three-fourths or more of the wall. In the latter case, the exterior surface is pale brown, the interior gray to blackish, and it is plain that air was excluded from the interior in firing. A few sherds are suggestive of the effect of combined smudging and oxidation obtained in white-rimmed black ware. The oxidized portions of most of the pastes varies from red (5YR 5/6, 7.5YR 6/6) to brown (7.5YR 5/4) depending on degree of oxidation. Buff (10YR 8/4) or light gray (10YR 7/2) are less common.

It appears from the original colors that at least two clays were used, a light red and a buff, but on refiring to 850° C. in air, the color differences are less pronounced. The red to brown pastes and also the light gray, which in the sherd appeared to be a slightly reduced buff become a clear light red (2.5YR5/6), and the buff becomes slightly redder and clearer (7.5YR 8/6). These tests show that there were two varieties of clay used, but they cannot be distinguished except by thermal test because of color variation and incomplete oxidation of the original sherds.

When carried to 1000° C., the pastes are still soft (under 3), and the color is but slightly changed. This is true of both the red and buff and suggests that they are related in composition. The clays were therefore refractory and it does not follow from the softness of the pottery that it was fired at a low temperature. It would still have been soft if fired at the upper temperature limit obtainable in primitive firing.

The sample is remarkably uniform in paste composition. To the naked eye the paste appears comparable in texture to that of the Fine Paste wares of Tres Zapotes, though it is less dense. But microscopic examination shows that it is entirely distinct, being tempered with volcanic ash composed of fine, thin splinters derived from vesicle walls of a pumice. Only stray small fragments of pumice occur; some have extremely fine vesicles, others are coarser, and the splintery ash of the paste could have been derived from this. A peculiarity of this pumice is that the vesicles contain a clear brown material. One sherd contained a few lumps of tuff (a consolidated volcanic ash), the fragments of which are similar in form and size to those that are free in the paste. The ash may therefore have been derived from a very soft tuff which in turn had been formed from a shattered vesicular glass. Mineral inclusions, principally quartz and stray flakes of mica, are very fine and sparse.

It is noteworthy that only one ash-tempered paste was found among the Tres Zapotes sherds examined, including a miscellaneous sample in addition to those described. The sherd, which is smudged and badly weathered, is from a "sub-ash" deposit.[44] The texture of the volcanic ash is comparable to that of the La Venta sample but even finer, and fragments of pumice are absent.

Owing to the fact that there has been no opportunity to determine the relative frequency of the paste variations that have been described or to compare notes with Dr. Drucker on possible stylistic correlations, interpretation of these data are unjustified. They are submitted primarily to define some of the variations that occur and to indicate the possibilities of recognizing consistent differences in material of this class.

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[44] "Sub-ash" was a laboratory designation ("sub-Laja" was used in the field), to refer to material from the Lower Tres Zapotes deposit.—P. D.

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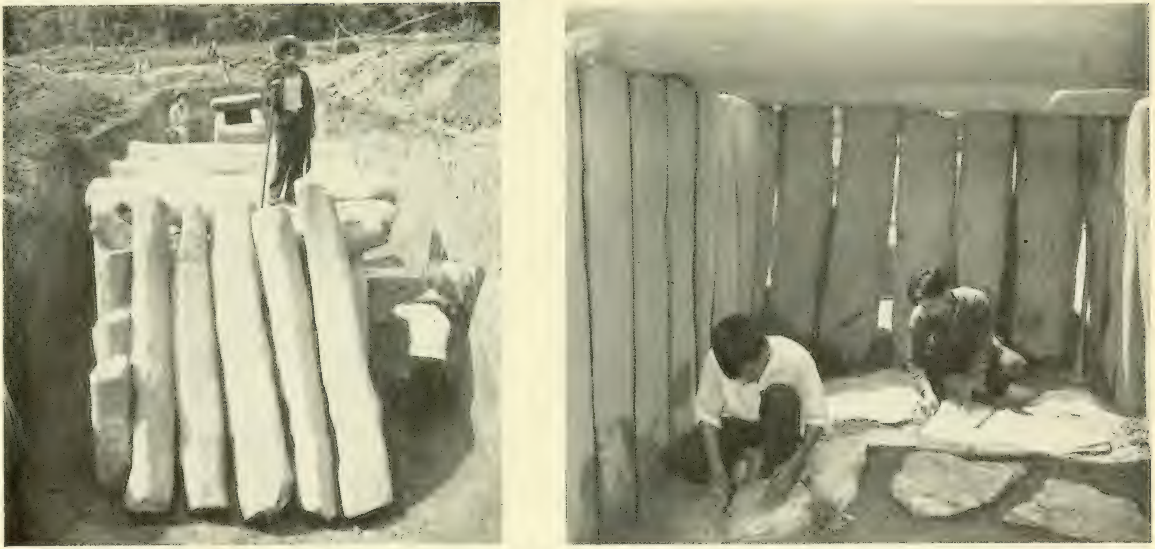
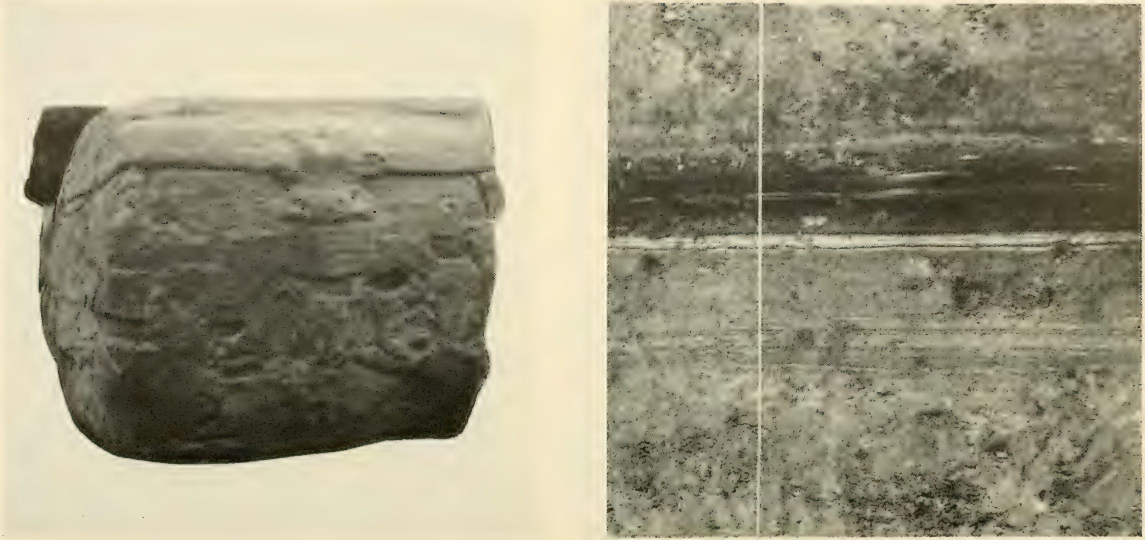
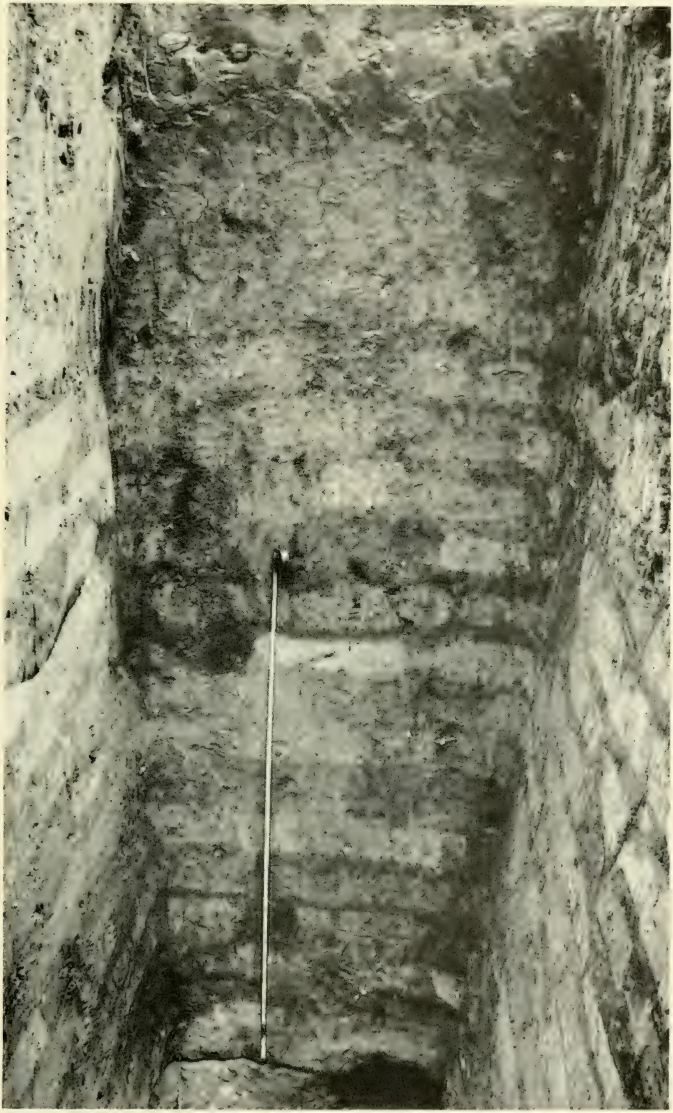


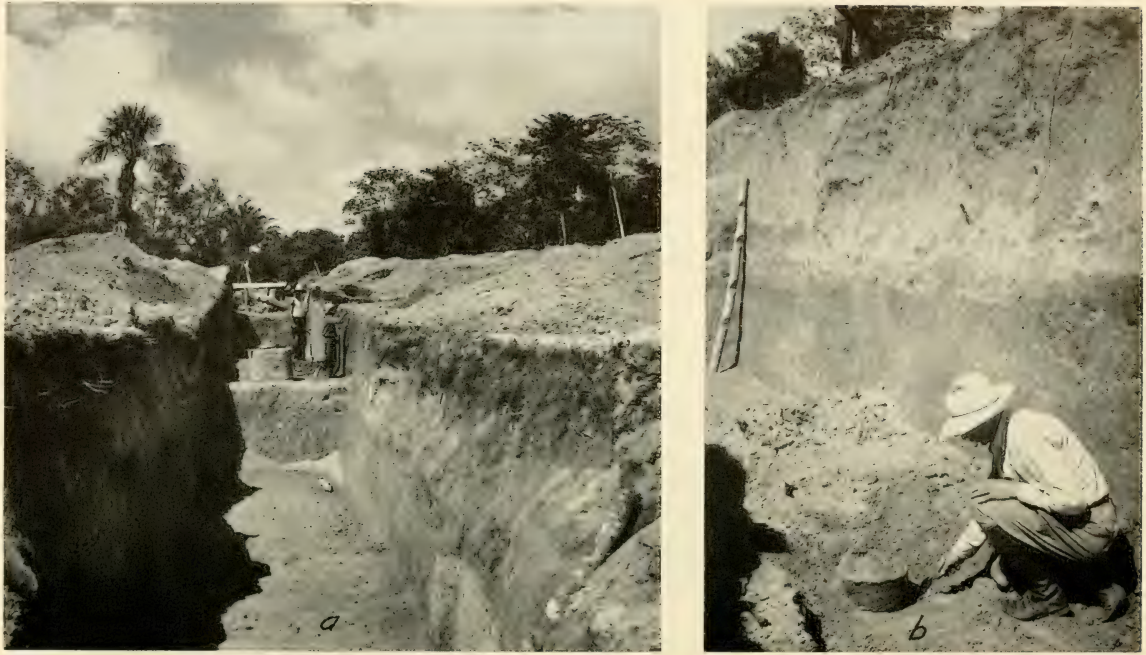
Tomb in Mound A-2. *Left*, Tomb cleared, prior to opening. *Right*, Interior of tomb, showing flagstone flooring after removal of burials (1942 excavations).



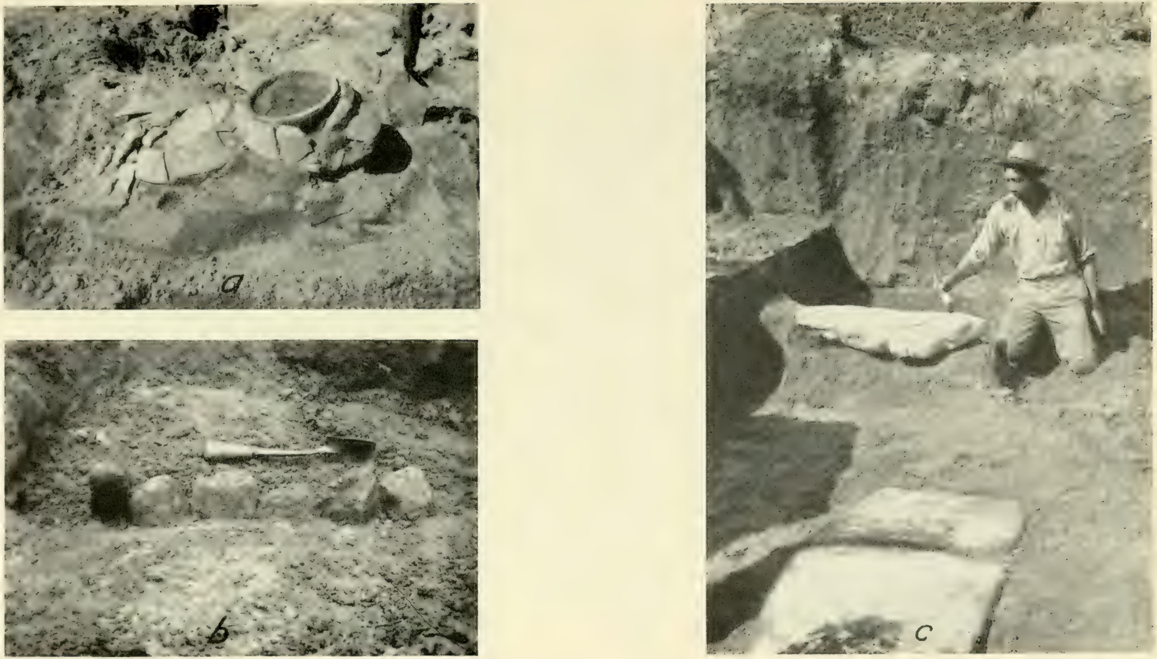
Left, Monument 6, the coffer of sandstone, after clearing and removal of most of the cover. *Right*, Close-up of layers of varicolored clays in wall of cut through entryway, south end of Ceremonial Court, A-1 (1942 excavations).



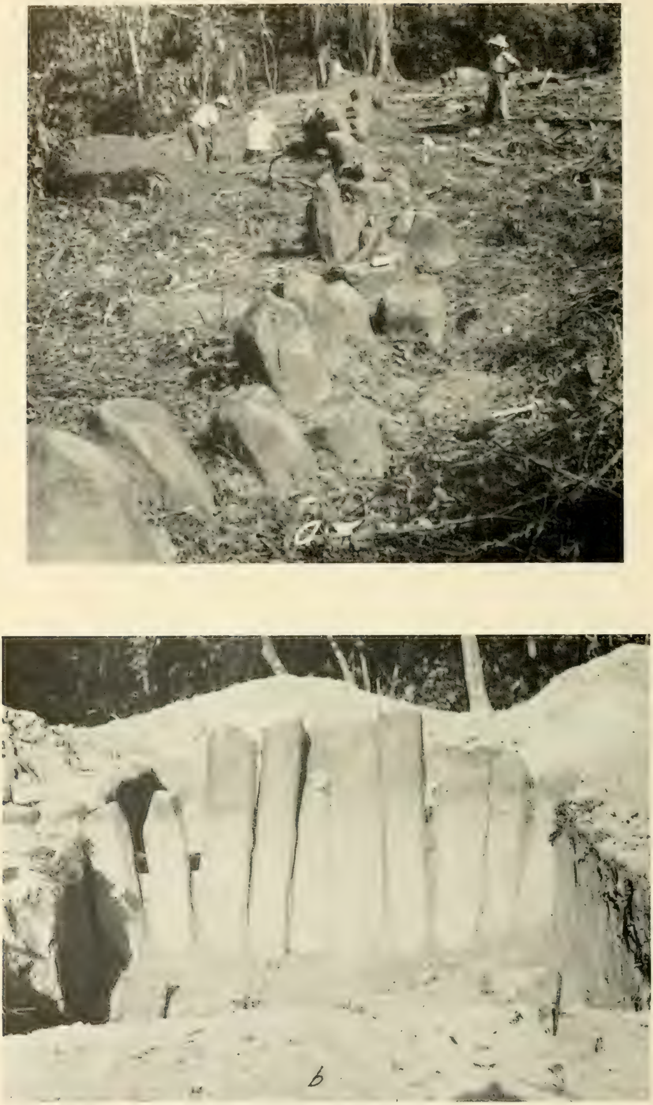
Adobes cut by pit in West Bastion of Ceremonial Court (1942 excavations).



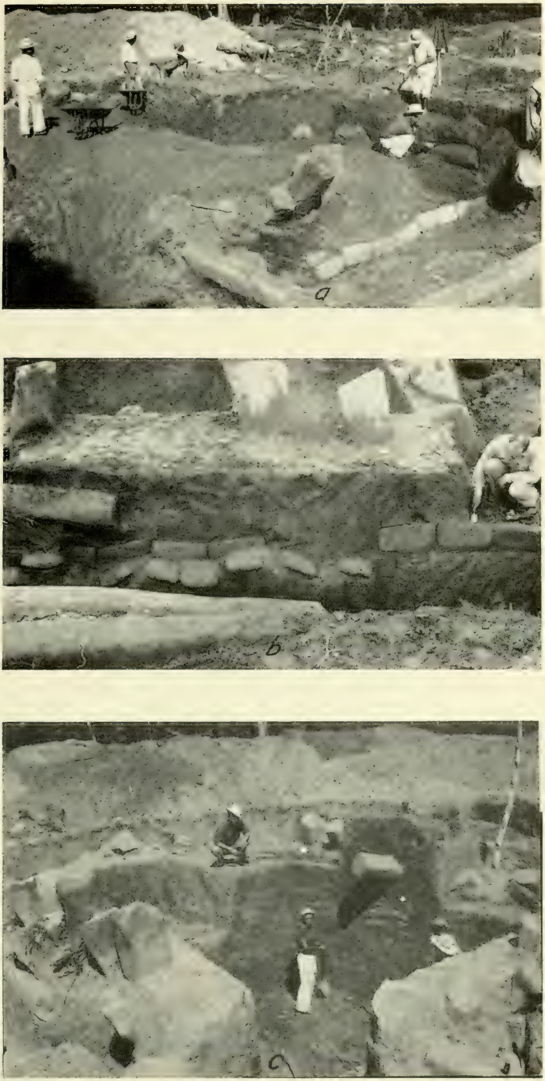
a, Portion of trench through Ceremonial Court, A-1, looking north; Monument 13 partially uncovered at center, Tomb A in background. *b*, Covered pottery vessel deep in clay formation, overlaid by sandy drift, in Ceremonial Court, A-1.



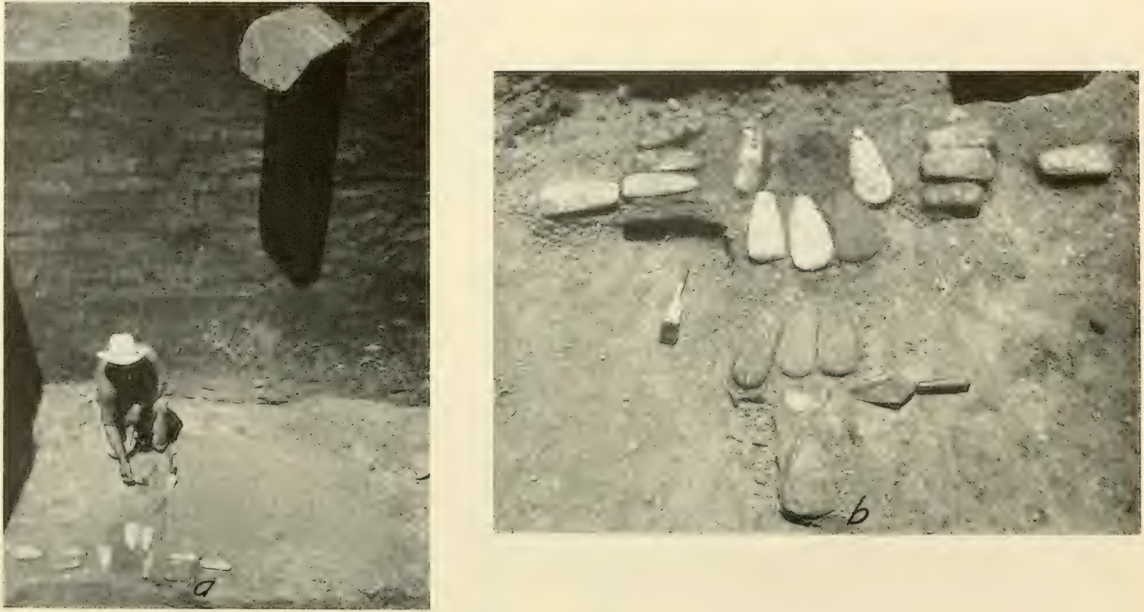
a, Covered pottery vessels in upper sand of Ceremonial Court, A–1. *b*, Celts in lower clay of main trench, Ceremonial Court, A–1. *c*, Monkey statue (Monument 12) and slabs, in situ, in upper sand of Ceremonial Court, A–1.



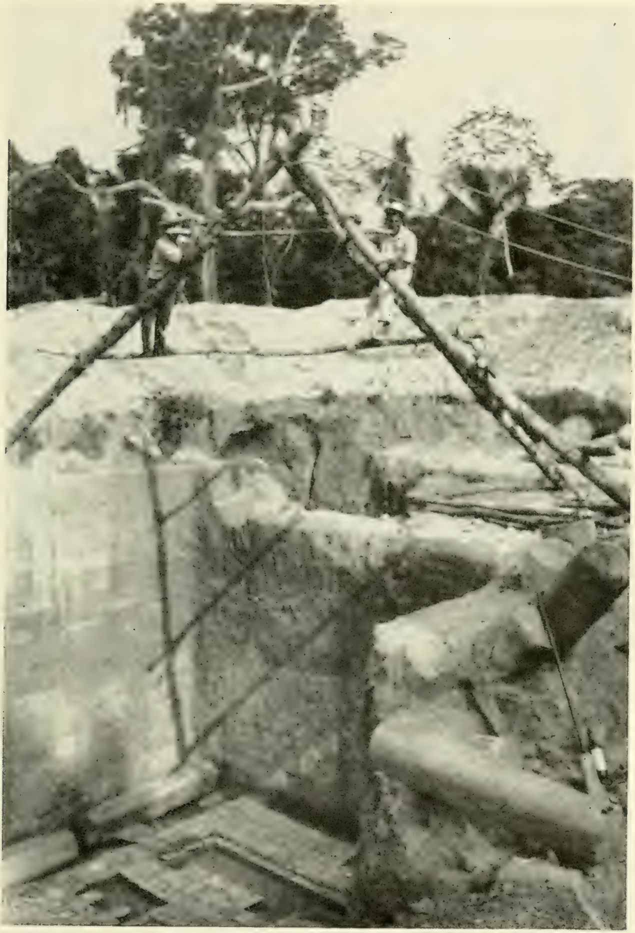
a, View north along columns on west side of Ceremonial Court, A–1. *b*, Columns exposed in situ in West Trench of Ceremonial Court, A–1.



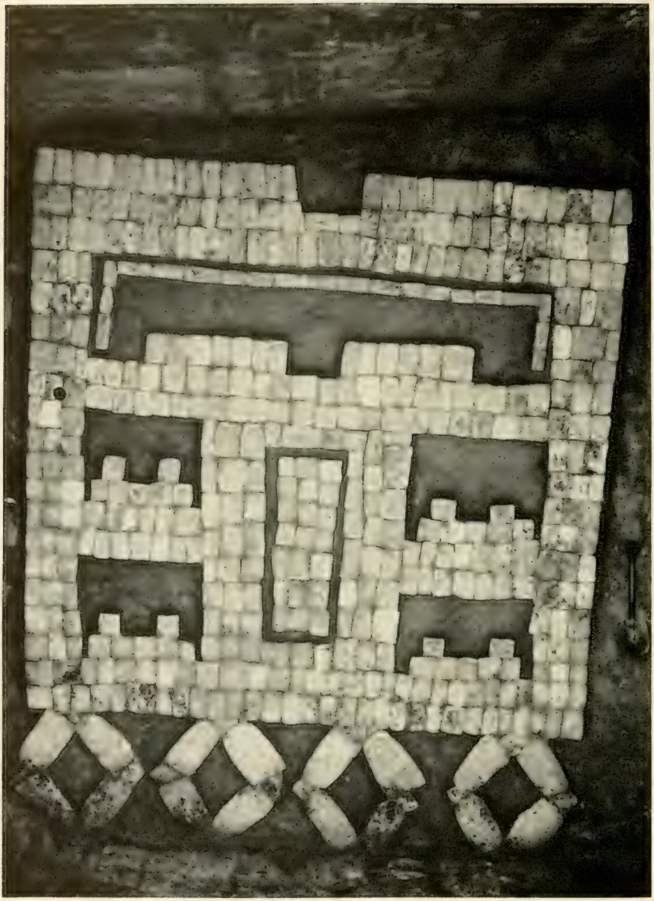
a, East Platform of Ceremonial Court, A–1, partially excavated, from southeast; note row of inset blocks on east face. *b*, Exterior of north wall of East Platform of Ceremonial Court, A–1, showing upright columns, horizontal bracer, and stone facing band. *c*, Interior of brickwork in East Platform of Ceremonial Court, A–1.



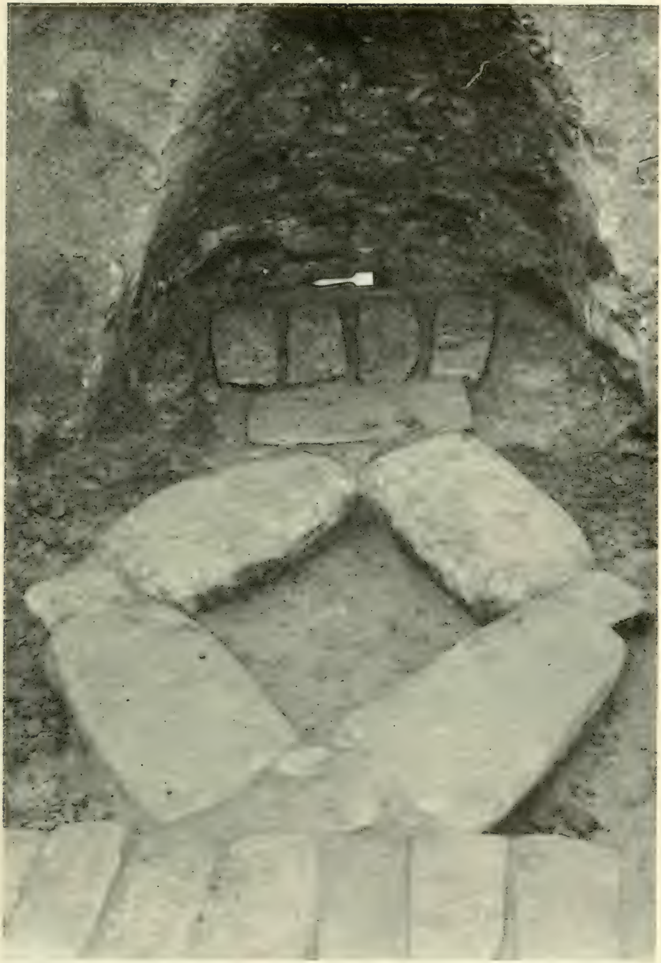
a, Brickwork and underlying clay rubble in East Platform of Ceremonial Court, A–1. *b*, Cruciform cache of celts and hematite mirror beneath brickwork in East Platform of Ceremonial Court, A–1; top of cross removed in earlier excavation.



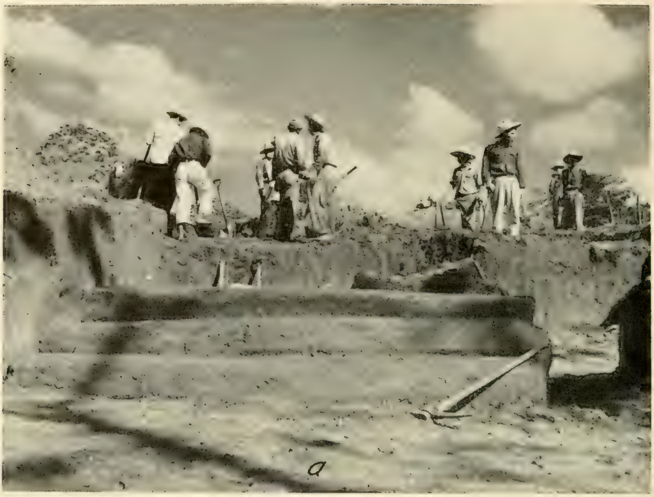
Interior of East Platform of Ceremonial Court, A–1, showing Pavement No. 1, clay rubble, brickwork, and overlying clay and sand.

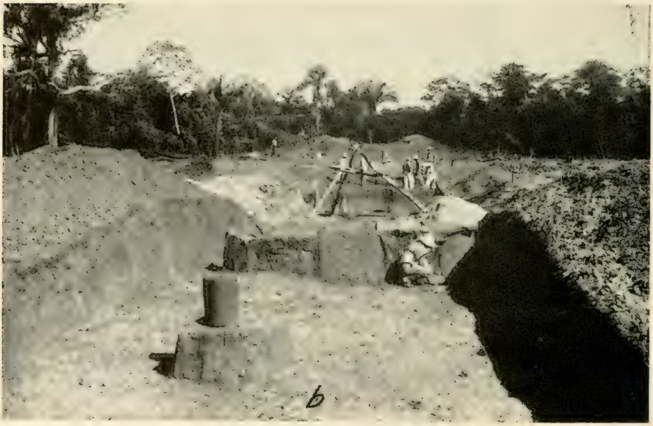


Pavement No. 1 beneath East Platform of Ceremonial Court, A–1; four appendages at bottom incompletely excavated (see also pl. 11). Top of photo is north.

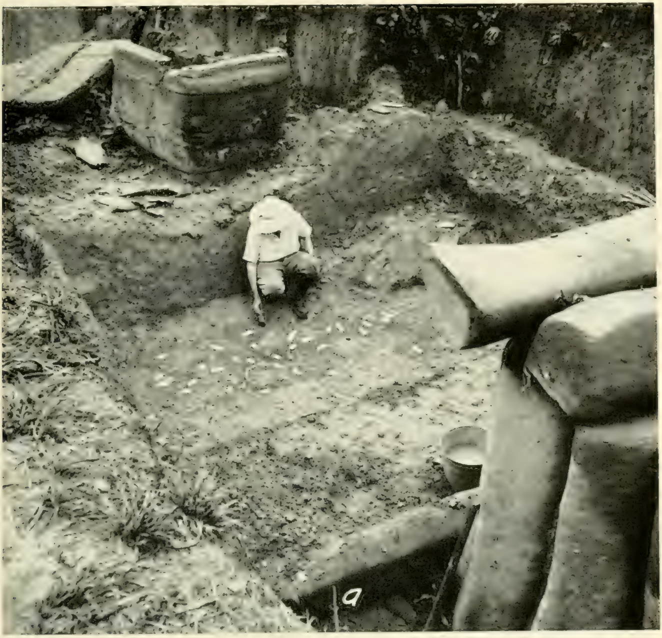


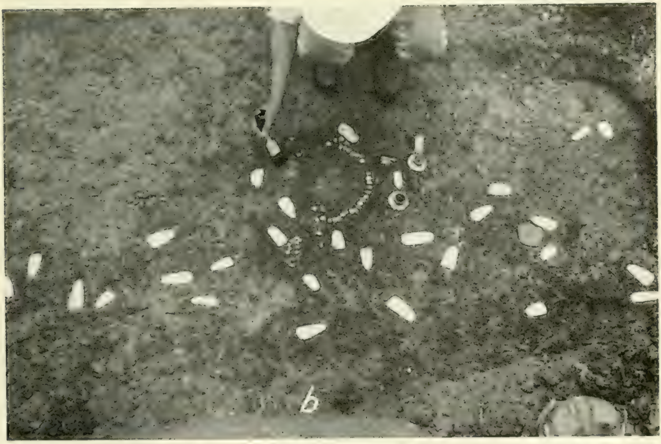
Detail of appendage at southeast corner of Pavement No. 1, beneath East Platform of Ceremonial Court, A-1; looking south.



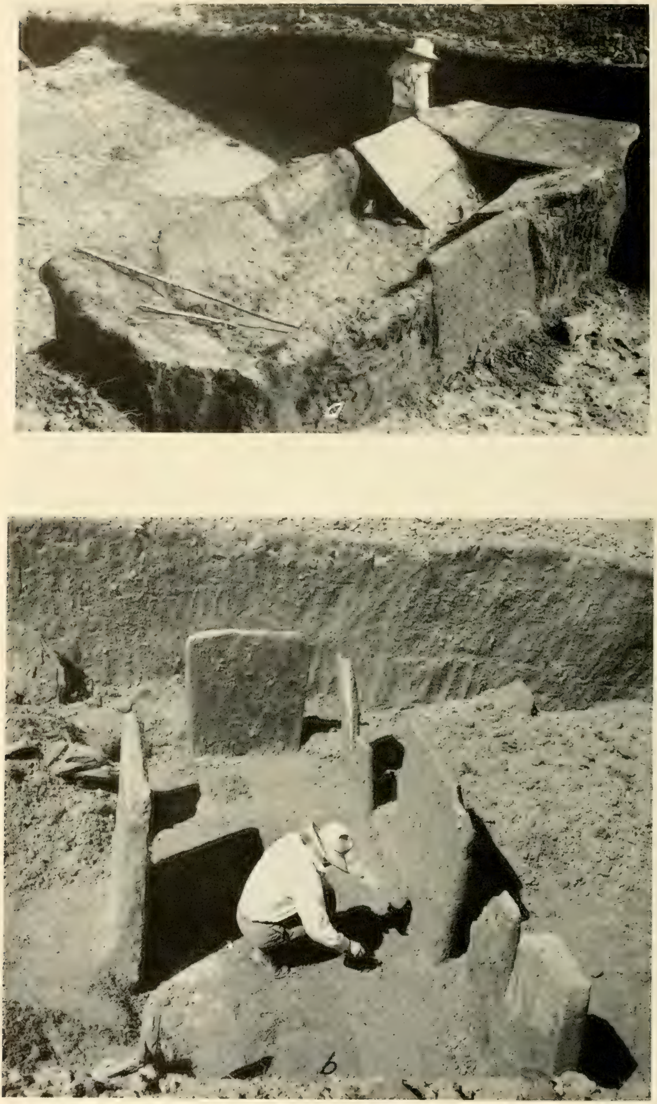


a, Steps of columnar basalt leading to south edge of Forecourt of Ceremonial Court, A–1; looking north. *b*, View north along main trench through Mound A–3 (foreground), across Ceremonial Court, A–1, to Mound A–2 (background).

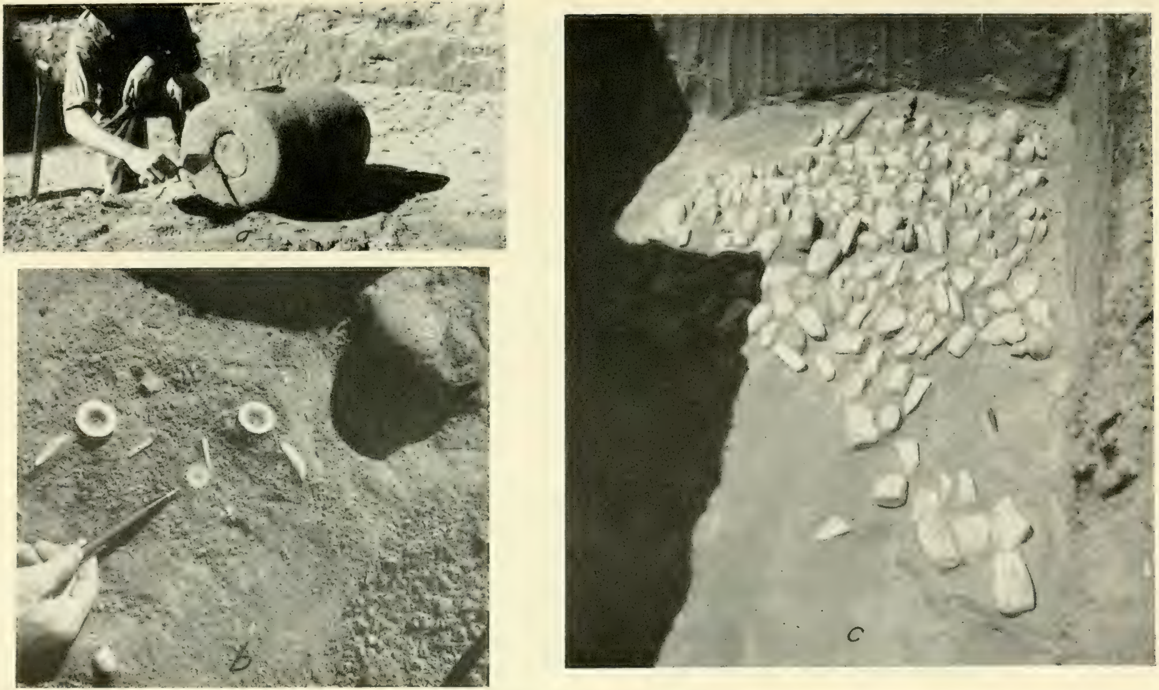




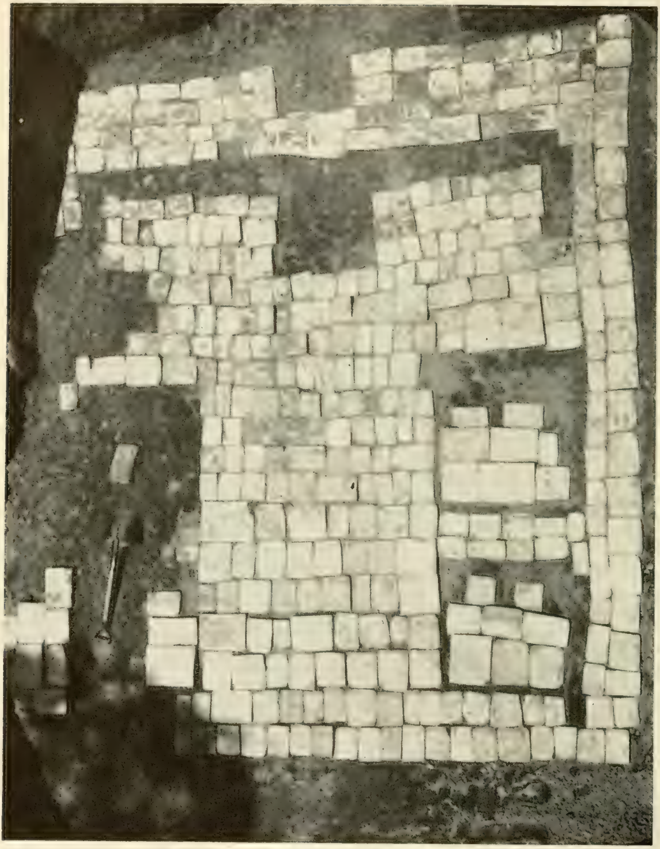
a, Grave deposit or cache (Tomb E) in North Mound, A–2, showing location relative to Tomb A and stone coffer excavated in 1942. *b*, Grave deposit or cache (Tomb E) in Mound A–2, showing jade celts, earplugs, beads, and other objects in situ.



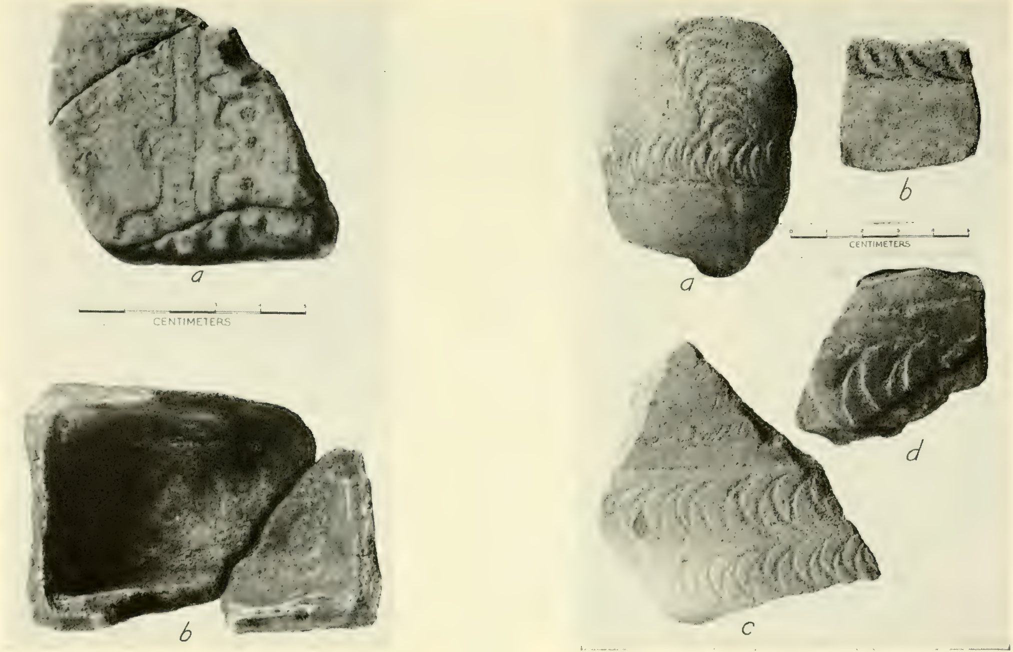
a, Stone cist (Tomb C) in South Mound, A–3, cleared but unopened. *b*, Stone cist (Tomb C) in South Mound, A–3, on completion of its excavation.



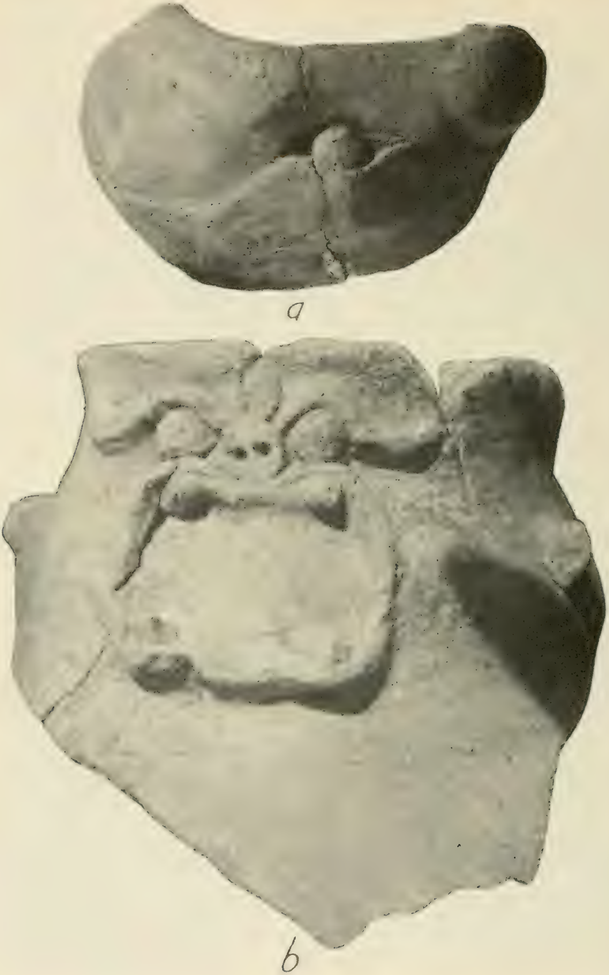
a, Stone cylinder (Monument 14), showing stone plug in lower end; Mound A–3. *b*, Jade burial offerings or cache from Tomb D on south slope of Mound A–3, in situ; clay vessel at upper right. *c*, Cache of serpentine celts south of Pavement No. 2, between Great Mound and Mound A–3.



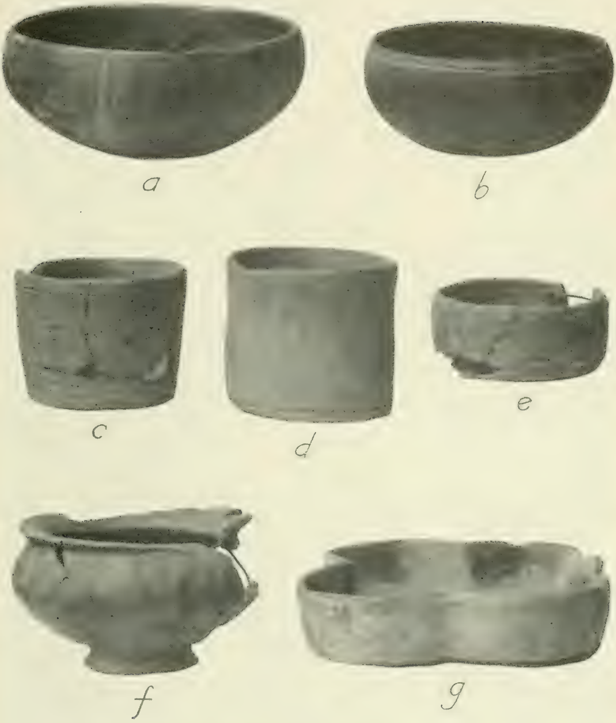
Pavement No. 2, near south edge of Mound A–3; top of photo is north.


a
CENTIMETERS
b
a
b
CENTIMETERS
d
c

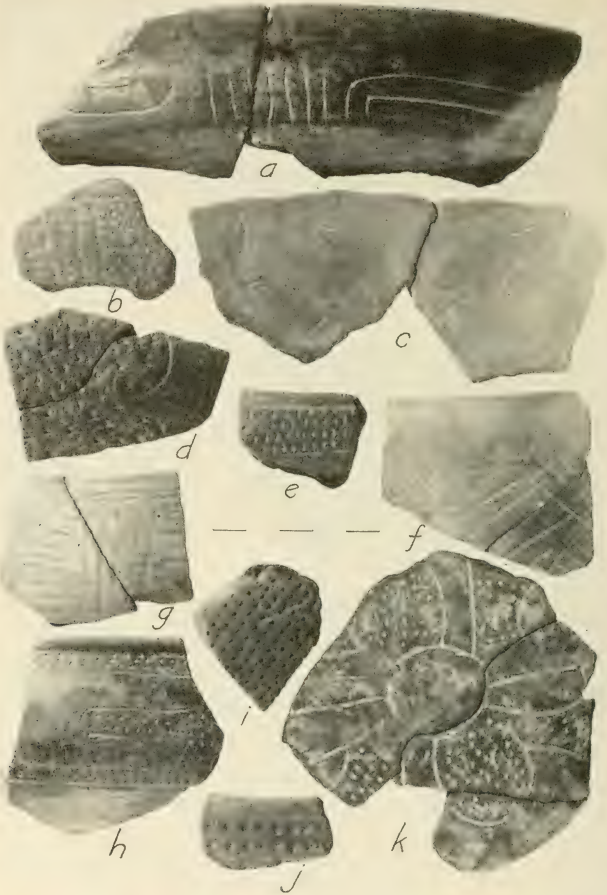
Left, Fragments of small rectangular vessels. *a,* Fine Paste Orange ware (for drawing of deeply incised design, see fig. 35). *b,* Coarse Buff ware. *Right.* Rocker stamped sherds. *a, b, c,* Coarse Buff ware; *d,* Coarse Brown ware.



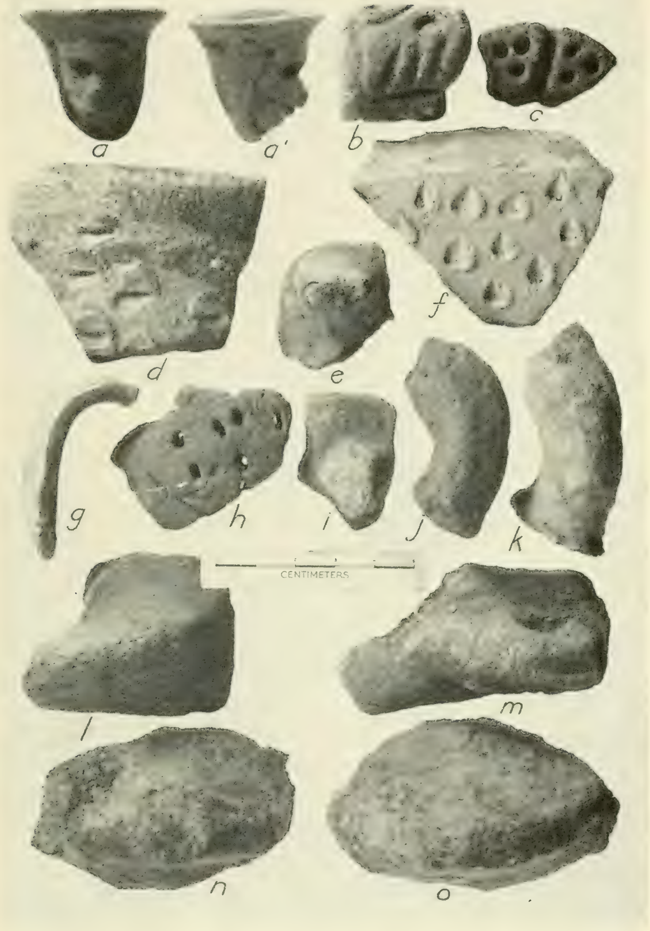
Sherds of effigy vessels of Coarse Buff ware. (Scale differs: *a* is about 7 cm. high; *b*, about 13 cm. For reconstruction of *a*, see fig. 30. *b*, National Geographic photo.)



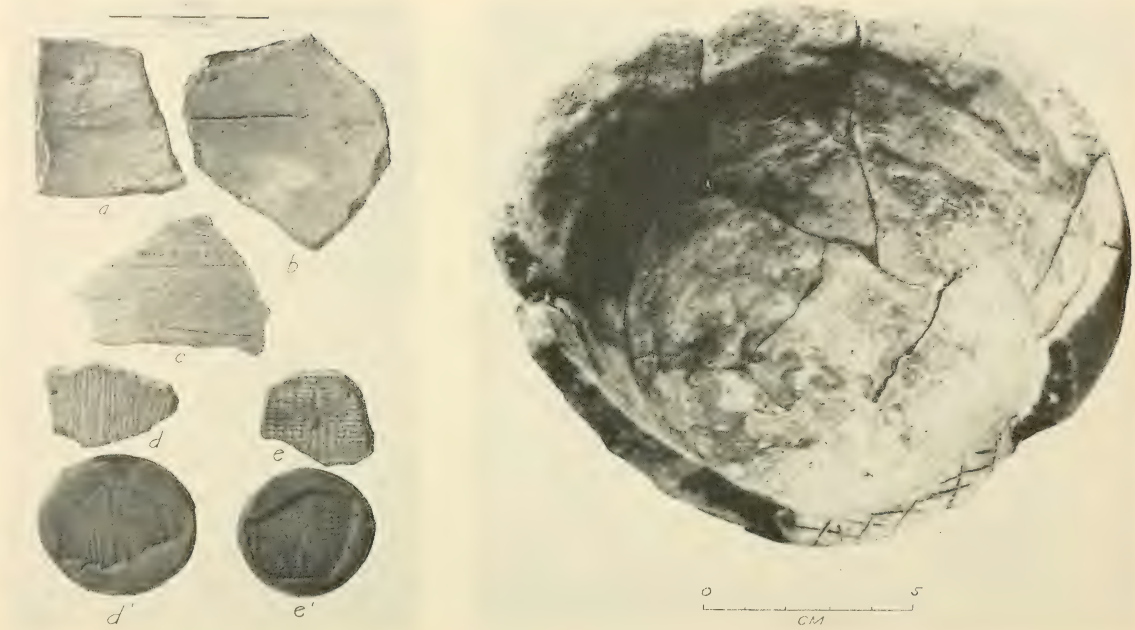
Complete vessels from 1943 excavations (restored by preparators of Museo Nacional de México). *a*, *b*, Coarse Black ware; *c*, *d*, *f*, Coarse Brown ware (?). *e*, Red on Coarse Brown ware bowl (for design restoration, see fig. 41, *a*). *g*, Coarse Buff ware.



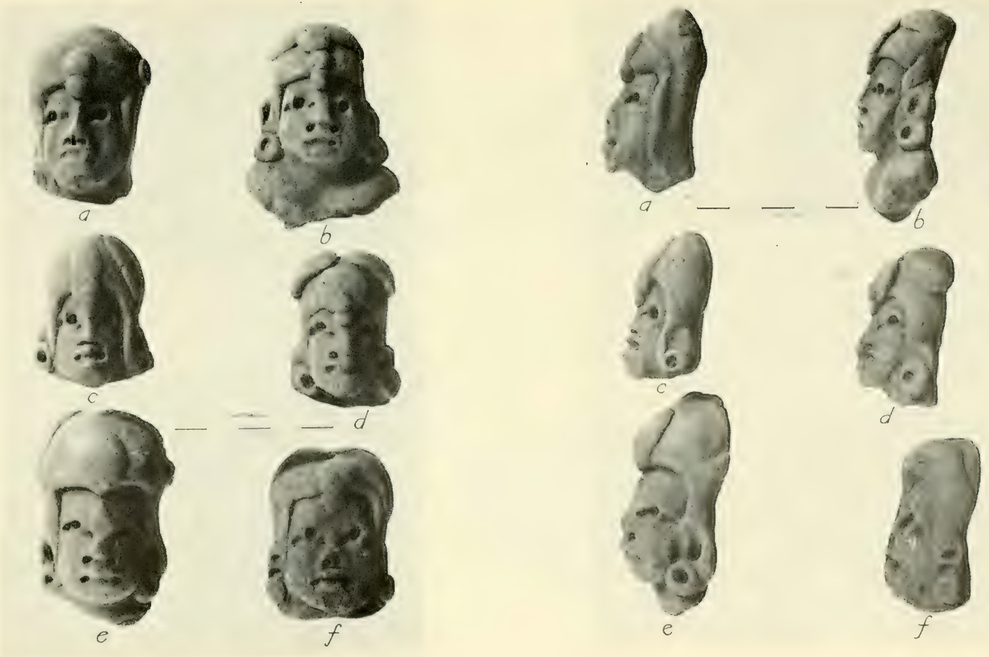
Incised, stamped, and punctate designs in various wares. *a*, *g*, *h*, Coarse Black ware (*g* is rim fragment of White-rimmed Coarse Black). *b*, *d*, *e*, *i*, *j*, Coarse Brown ware. *c*, *k*, Fine Paste Black ware. *f*, Coarse Buff ware. (For reconstruction of design of *k*, see fig. 33.)



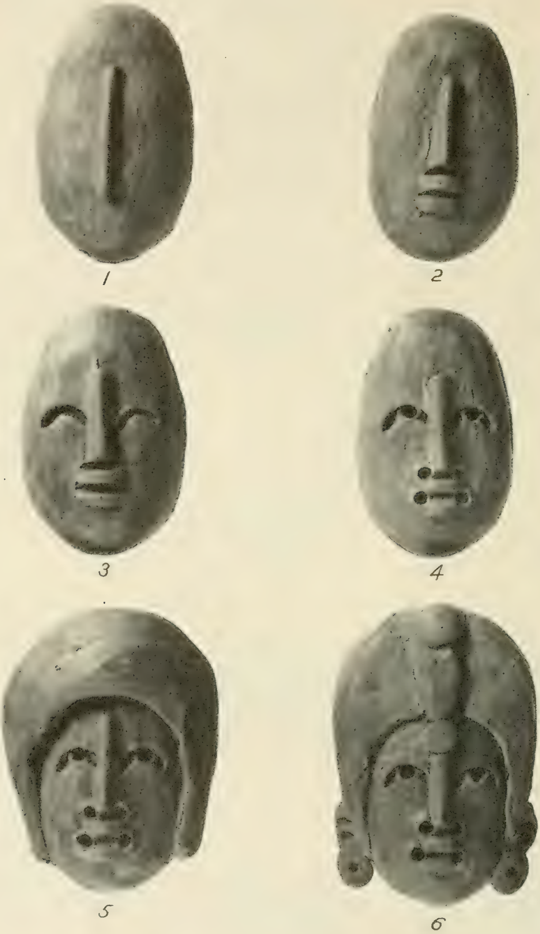
Miscellaneous ceramic features. *a*, *a'*, Front and side view of modeled vessel foot (?) or ornament. *c*, Pottery flare (?) or flat stamp fragment. *d*, "Thumbnail" impressed design on Coarse Buff ware sherd. *f*, Heavy punctate design on Coarse Buff ware sherd. *e*, *g*, *i*, *j*, *k*, *m*, Handle fragments. *h*, Perforated sherd (figurine or rattle fragment ?). *l*, *n*, *o*, Vessel lugs.



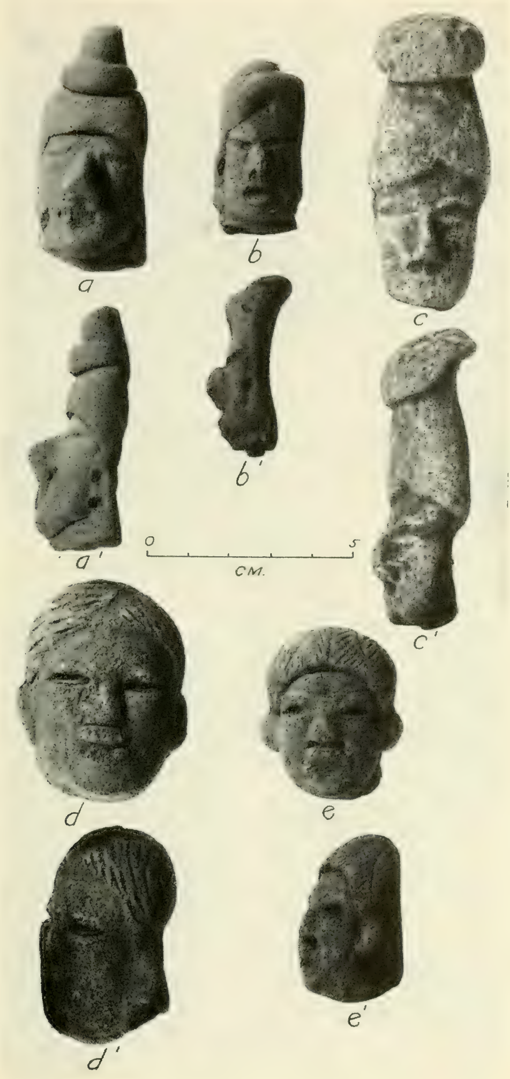
Ceramic techniques. *Left*, *a*, *b*, Interiors of jar fragments showing what might possibly be mold seams, or patched coil joints. *c*, *d*, "Raked" jar exteriors. *e*, Sherd with textile impression, apparently of closely woven twined basketry (?). *d'* and *e'* are casts in plasticene of *d* and *e*. *Right*, Interior of poorly made Coarse Buff ware bowl with clear indication of coil joints (cross-hatching on lower side indicates area of plaster).



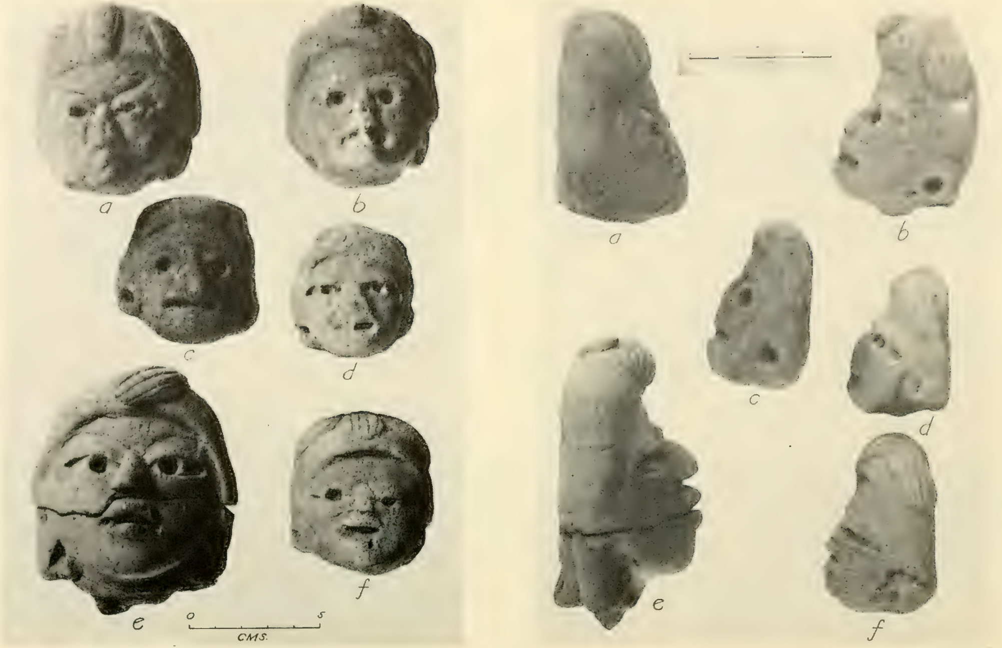
Tres Zapotes figurine heads, I–A–1, showing significant features: the typically long faces with wide jowls, heavy punctations, and coarse paste of which they are made. *Left*, Full-face view of heads. *Right*, Profiles of heads.



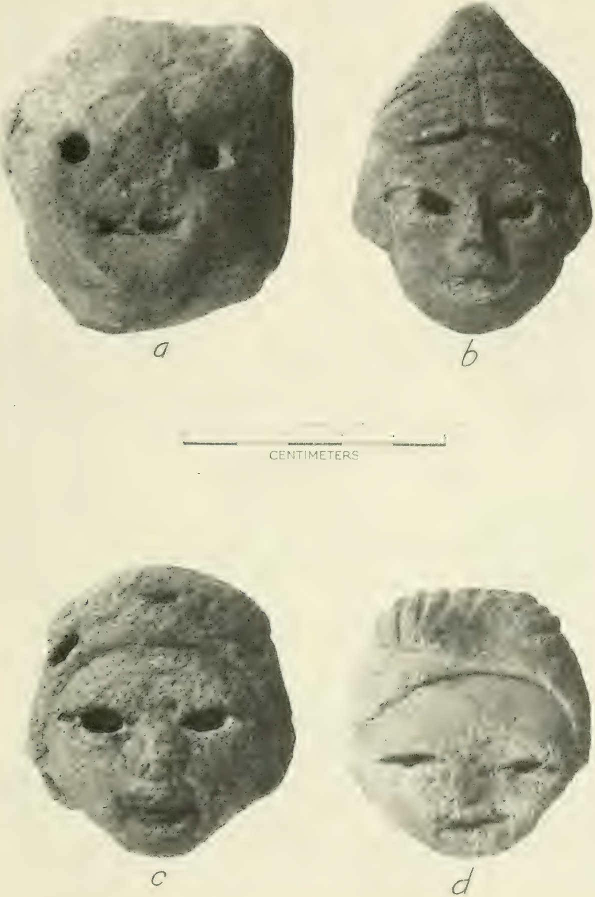
Steps in construction of Style I figurine face, modeled in plasticene. No incomplete examples at these stages have been found; the steps are based on superposition of features in various specimens (i. e., arc of an eye cutting into the nose, indicating nose had been shaped first). The stub that forms the neck and back of the head, to which the face is welded by means of the headdress or hair, was omitted. (See Drucker, 1943 a, pl. 65, *s* and *v*.) The un-Olmec look of my inexpert final stages is purely accidental.



Tres Zapotes figurine heads. *a*, *b*, *c*, II–A–1. *d*, *e*, I–B–3/II, that is, I–B–3 specimens showing influence of Style II in treatment of eyes and mouth.



La Venta figurines, general digging. (All figurines shown in following plates are from La Venta.) *Left*, *a*, I–A–3. *b*, I–A–3. *c*, I–B–3a. *d*, I–B–3a. *e*, I–B–3a/4. *f*, I–B–3a. The two I–A–3 specimens show very plainly the trend toward the wide short face of I–B–3. *Right*, profiles of full-face specimens on left. Note tendency to convex profile in "*e*," indicating influence of I–B–4.


a
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CENTIMETERS
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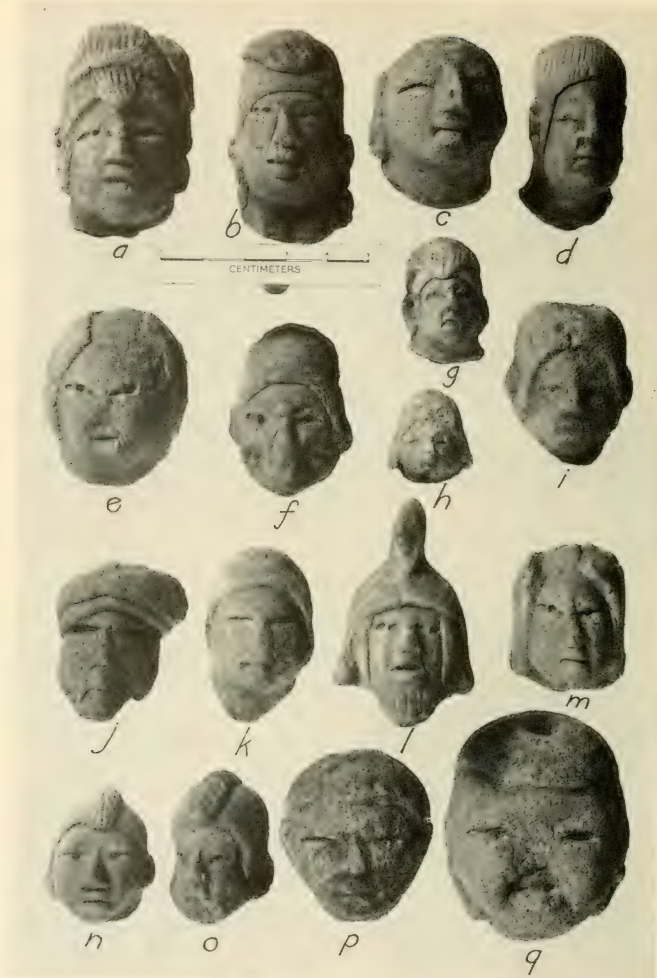
Figurines, general digging. *a*, I–A (3?). *b*, I–B–3a with aberrant headdress. *c*, I–B–3b. *d*, I–B–3b/II.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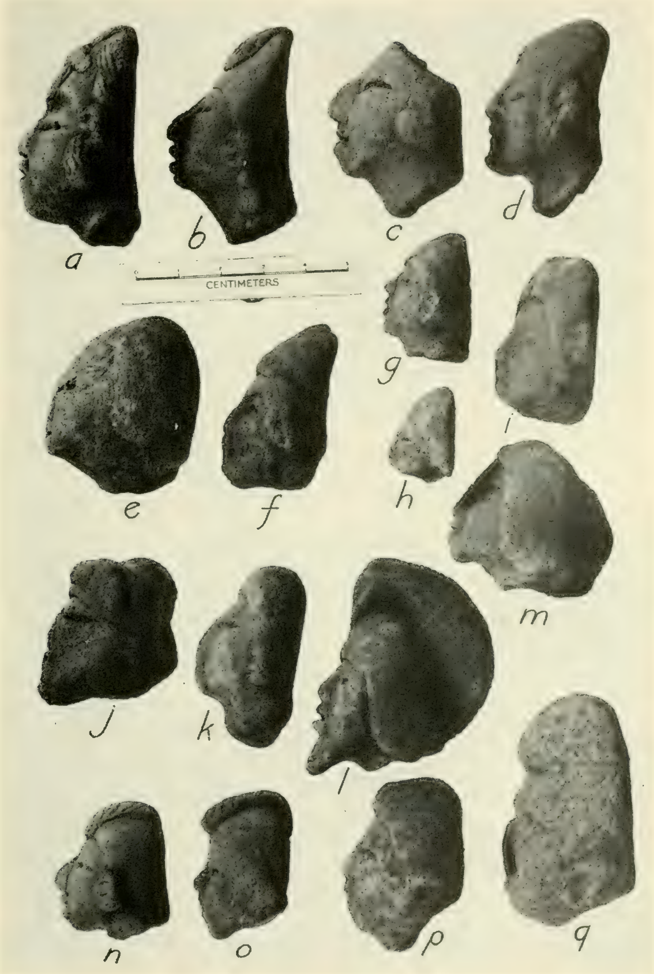
Figurines, general digging. *a*, I–B–4. *b*, I–B–4/II. *c*, I–B–4/II. *d*, I–B–4/III. *e*, I–B–4. *f*, I–B–2. *g*, I–B–4. *h*, I–B–4/II. *i*, I–B–4/II. *j*, I–B–4/II. *k*, I–B–4/II. *l*, I–B–1/4. *m*, I–B–1/4 (originally had beard and crested helmet like "*l*"). *n*, I–B–3b. *o*, I–B–3b. *p*, I–B–3b/II. *q*, I–B–3b/II.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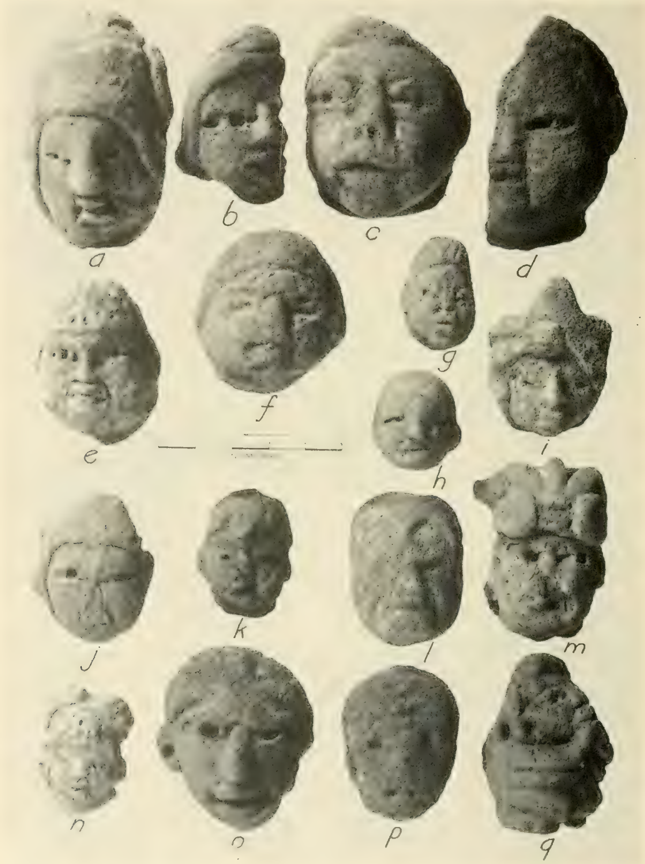
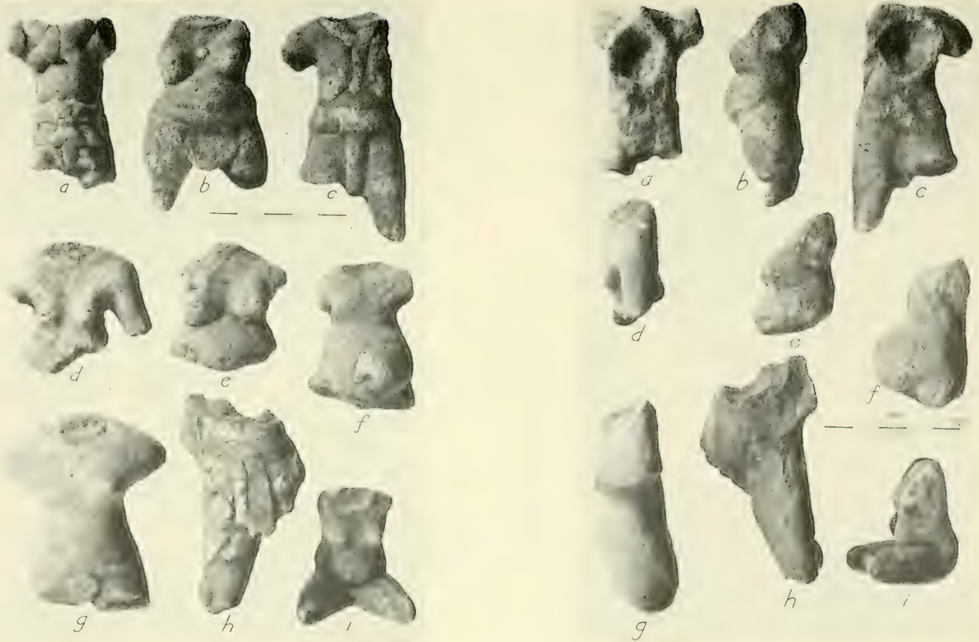
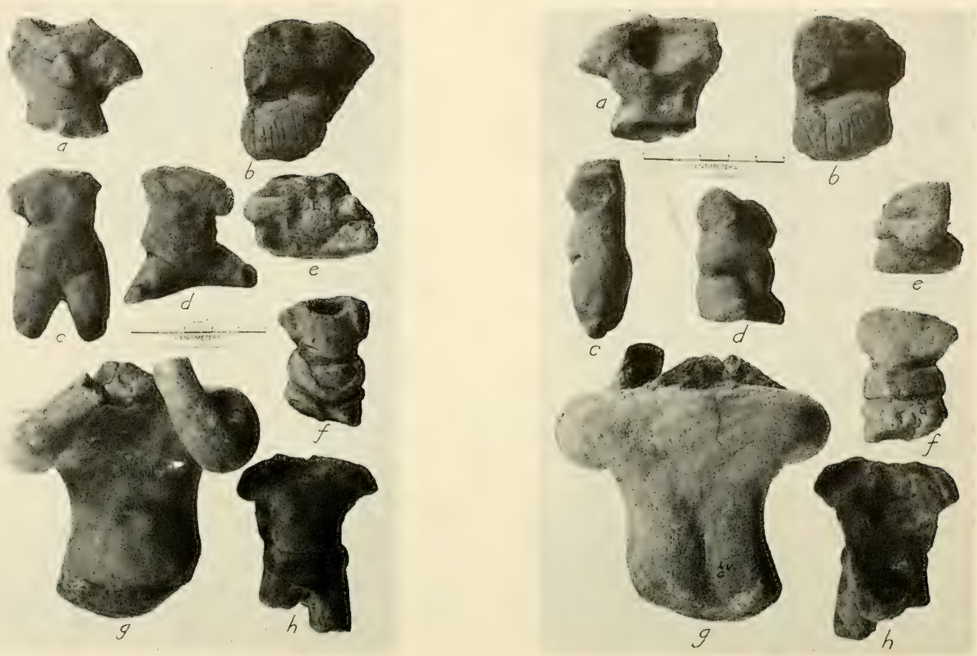
Figurines, profiles of plate 28 specimens.



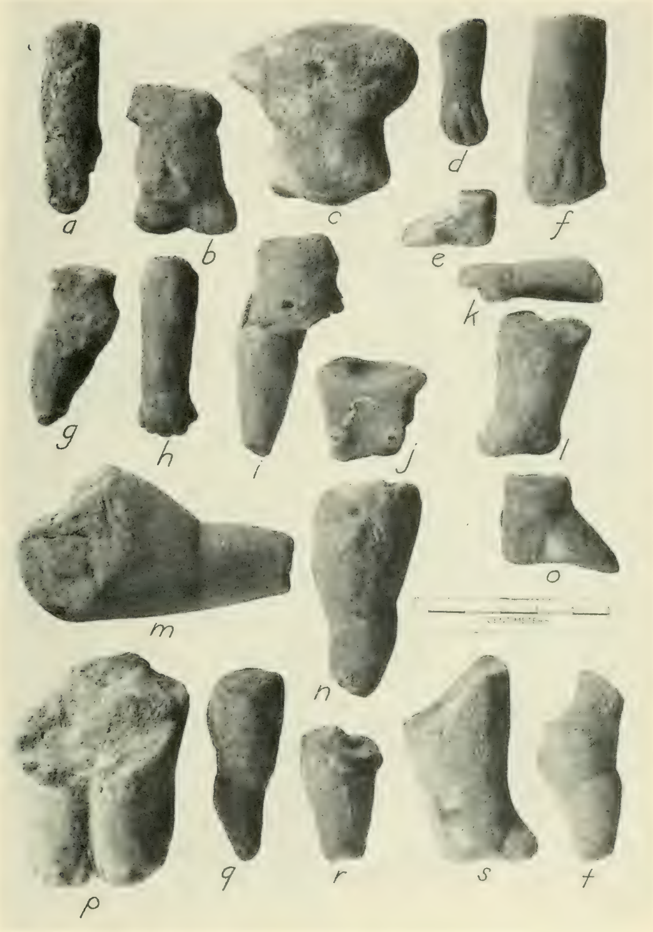
Figurines, general digging. *a*, I–C–1/II. *b*, I–B–3a. *c*, III–A–1/I (?). *d*, I–B–3b. *e*, I–B–3b. *f*, I–B–3a (II). *g*, I–B–A/IA. *h*, I–B–3a/II. *i*, I–B–3a/II. *j*, I–B–3a. *k*, I–B–3b (?). *l*, I–B/III. *m*, I–B aberrant. *n*, I–A–3 (?). *o*, I–B–3b. *p*, I–B–3b (?). *q*, I–A–3 aberrant (squatting hunchbacked figure, perforated for suspension.



Figurines, general digging. *Left*, Front view. *a*, *c*, *h*, I–B–1 bodies with elaborate dress (with whistles on backs, see pl. 23). Remainder: I–A or I–B bodies. *Right*, Side and back views of specimens shown at left.



Figurines, general digging. *Left*, Front view. *a*, *f*, *h*, I–B–1 bodies with elaborate dress (*a*, *h* had whistles on backs, see pl. 22). *b*, Aberrant figurine body of a seated figure, with wide collar, cape, and kilt. Remainder: I–A or I–B bodies. *Right*, Side and back views of specimens shown at left.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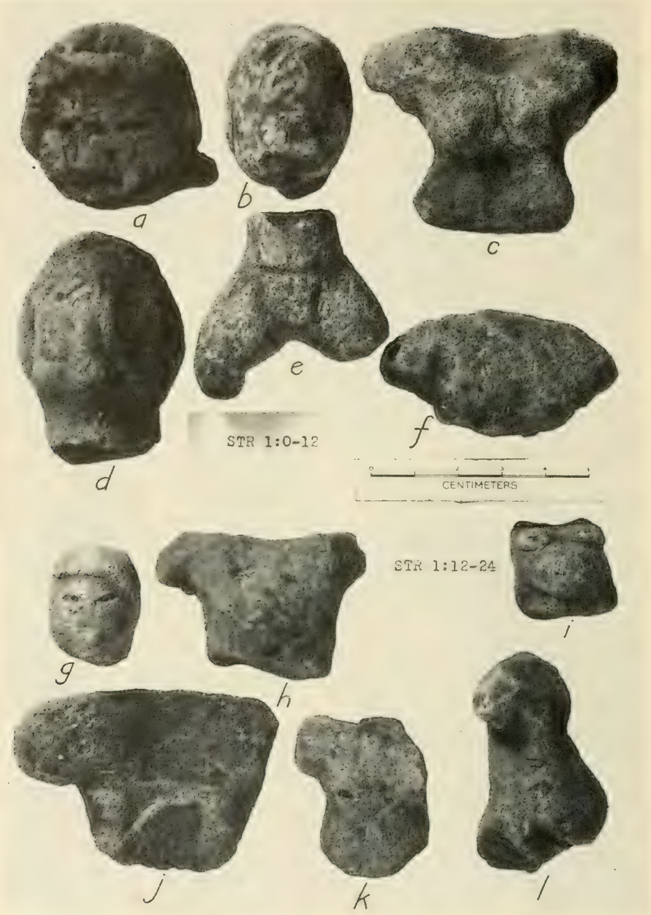
Limb and body fragments of figurines. *e*, *h*, *k*, *o*, Probably of III–A–1 figurines; remainder, probably I–A or I–B, except *p*, aberrant type (possibly I–C–1).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CENTIMETERS
STR 1:12-24
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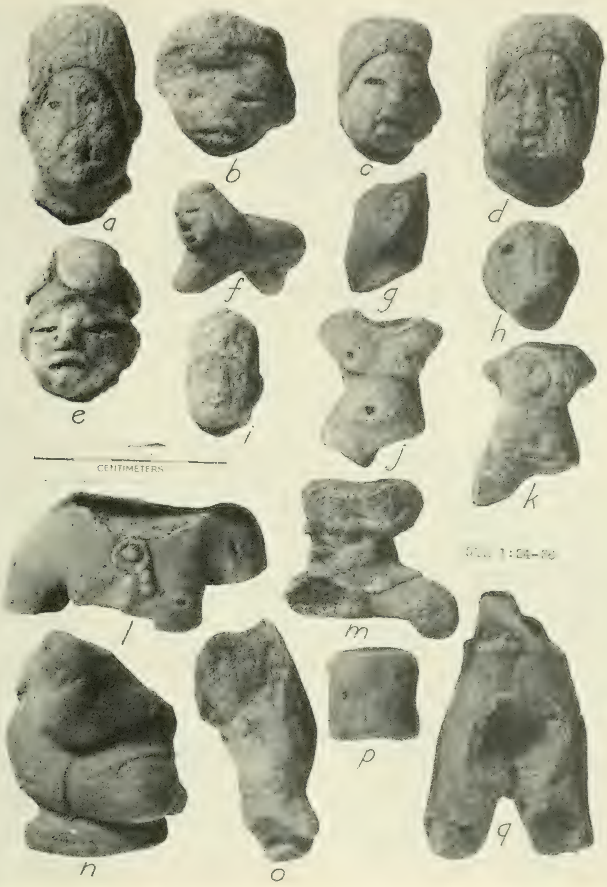
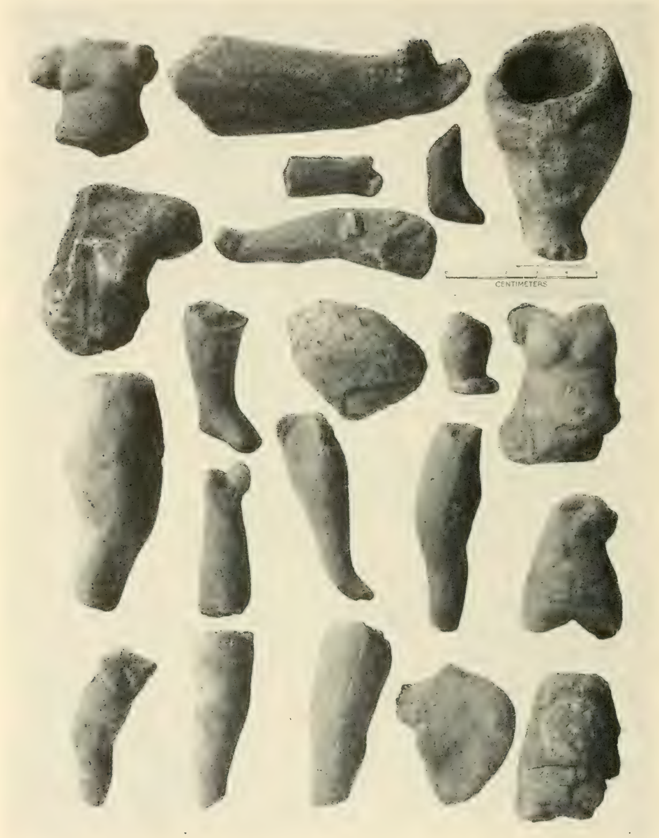
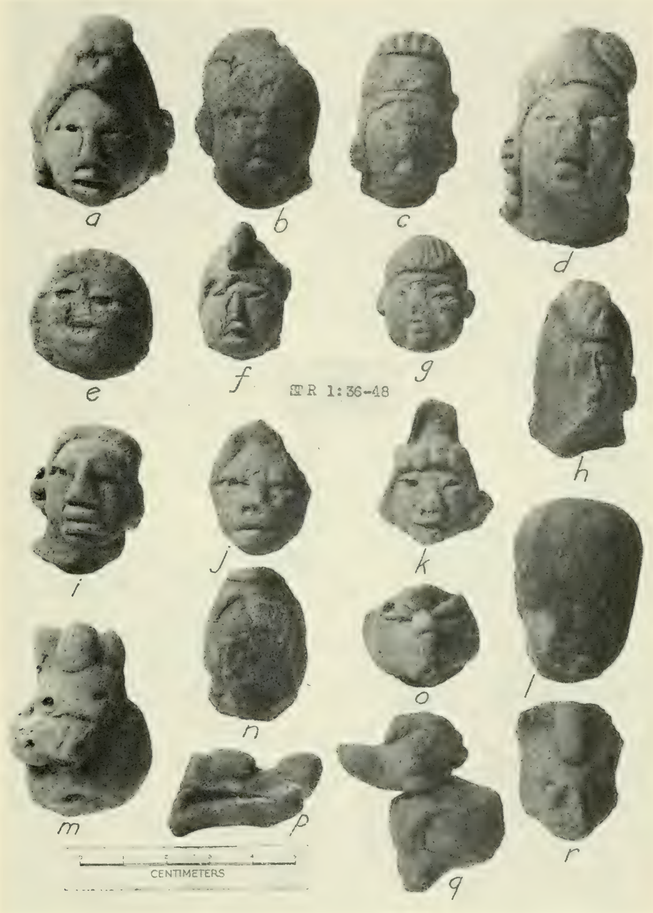
Figurines, Stratitrench 1, Levels 1 and 2. *a-f*, Level 1. *g–l*, Level 2. *a*, I–B–3a. *b*, III–A–1. *g*, I–B–A. *d*, Snake head, Style ?. *c*, *e*, *f*, *h–l*, I–A or I–B body fragments.



Figurines, Stratitrench 1, Level 3. *a*, I–B–4. *b*, I–B–3a/II. *c*, I–B–3a/II. *d*, I–A–3. *e*, I–B–3a/II (I–C influence?). *f*, I–B–3b/II with animal (?) body (on all fours). *g*, III fragment. *h*, Animal head (Style I ?). *i*, I–A–3. *j–l*, I–A or I–B body fragments. *m*, I–B body, with cape, kilt. *n*, III body fragment (?); modeled body seated on stool. *o*, III–A–1, arm and hand. *p*, Solid earplug (?). *q*, I–B–1, body fragment back view, showing attachment of whistle.



Figurines, Stratitrench 1, Level 3. Miscellaneous body, arm, leg, etc., fragments.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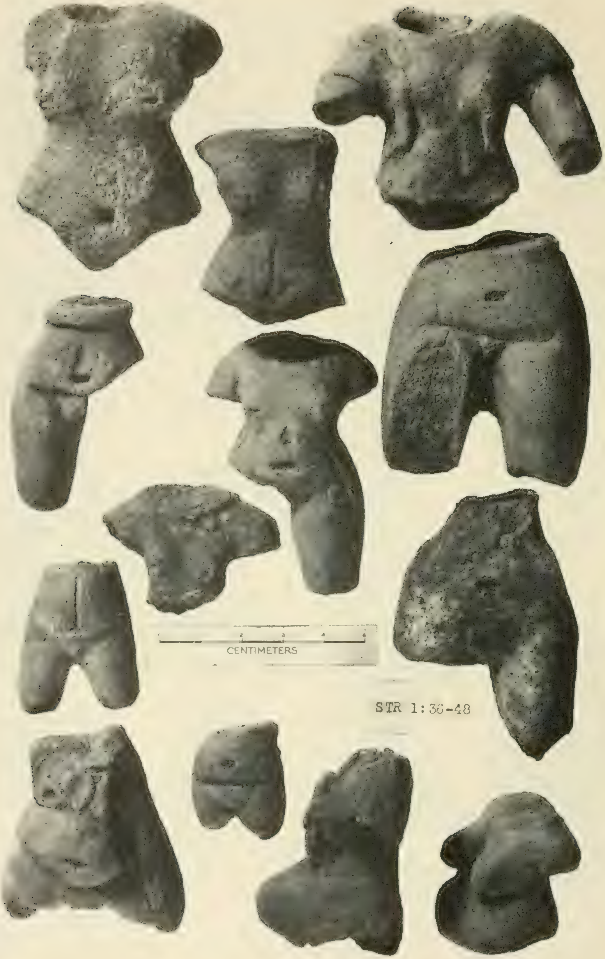
CENTIMETERS

Figurines, Stratitrench 1, Level 4. *a*, I–B–4. *b*, I–A–3 (?) (or I–A–3/III?). *c*, I–B–4. *d*, I–B–4/II. *e*, I–B–3b. *f*, I–B–3a/II. *g*, I–B–3b. *h*, I–B–4/II. *i*, I–B–4/II aberrant (no headdress). *j*, I–B–3b. *k*, I–B–4/II. *l*, III–A–1. *n*, Probably I–B–4. *m*, *o*, *p*, *r*, Animal and bird figurine fragments, Style 1. *q*, Small whistle.


CENTIMETERS
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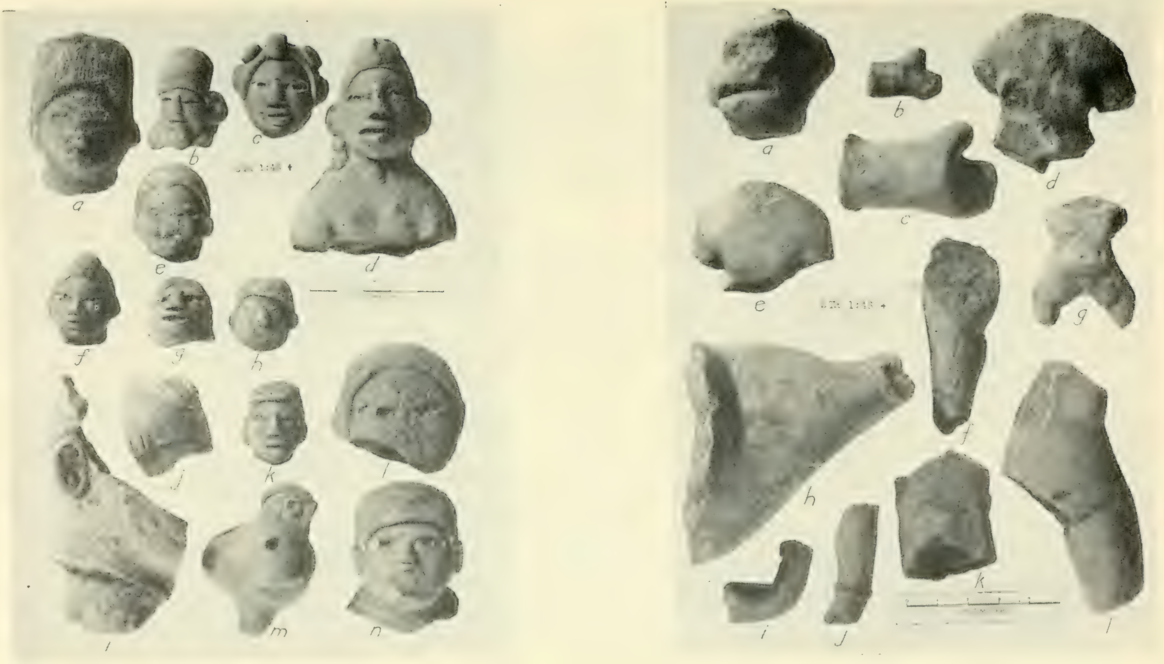
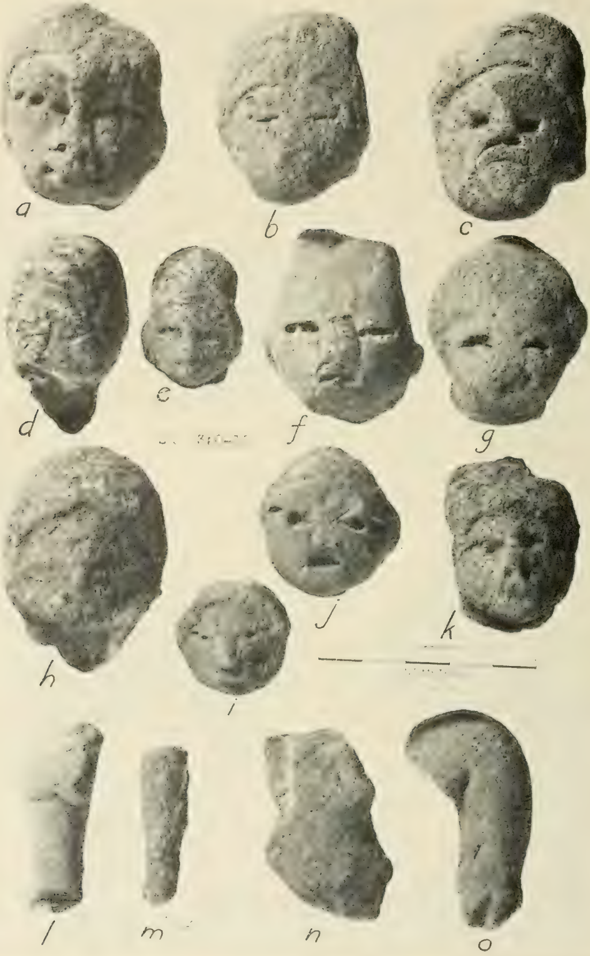
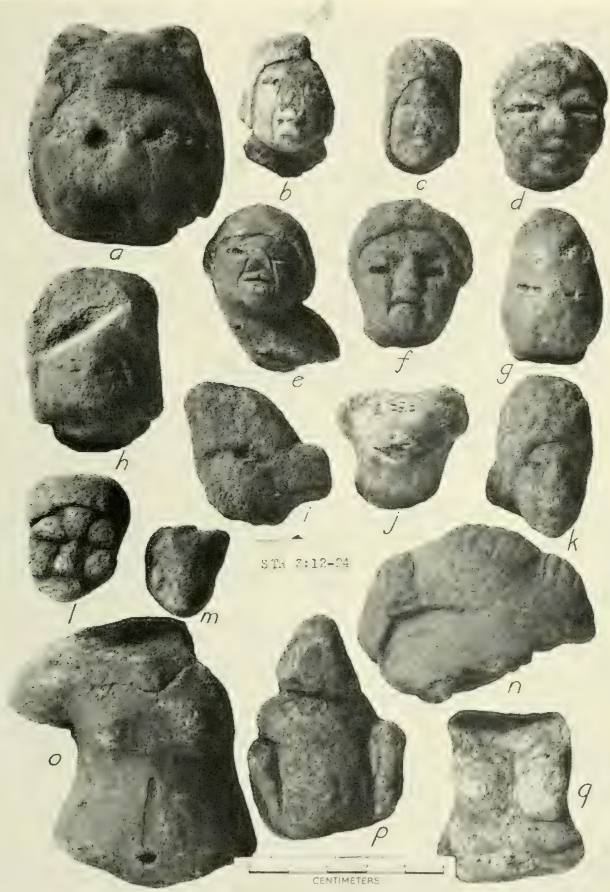
Figurines, Stratitrench 1, Level 4. I–A or I–B bodies.



Figurines, Stratitrench 1, Level 5. *Left*, *a*, I–B–4/II. *b*, I–B–1/II. *c*, I–B–3a. *d*, I–B–4. *e*, I–B–3b. *f*, I–B–3b/II. *g*, I–B–3b crude aberrant. *h*, I–B–3a/II. *i*, III–A–2. *j*, III–A–2. *m*, Bird whistle, Style 1. *n*, I–B–3a/II. *Right*, *a*, Style I aberrant body (in profile), with hunchback, protuberant belly. *b*, *d–g*, *i–l*, I–A or I–B body and limb fragments. *c*, III–A–1. (?) arm and hand. *h*, III–A–2 (2) arm and hand.



Figurines, Stratitrench 3, Level 1. *a*, I–A (probably I–A–3). *b*, I–B–4/II. *c*, I–A–3 (?). *d*, III–A–1 (not clear in plate, but specimen shows carefully modeled ears, vestiges of modeled facial planes). *e*, I–B–4. *f*, I–B–4/II. *g*, I–B–3a. *h*, (?) (proportions suggest I–A–3). *i*, I–B–3a/II. *j*, I–B–3b. *k*, (?) (probably I–A–3). *l*, *m*, *o*, I–A or I–B arms. *n*, I–A or I–B torso.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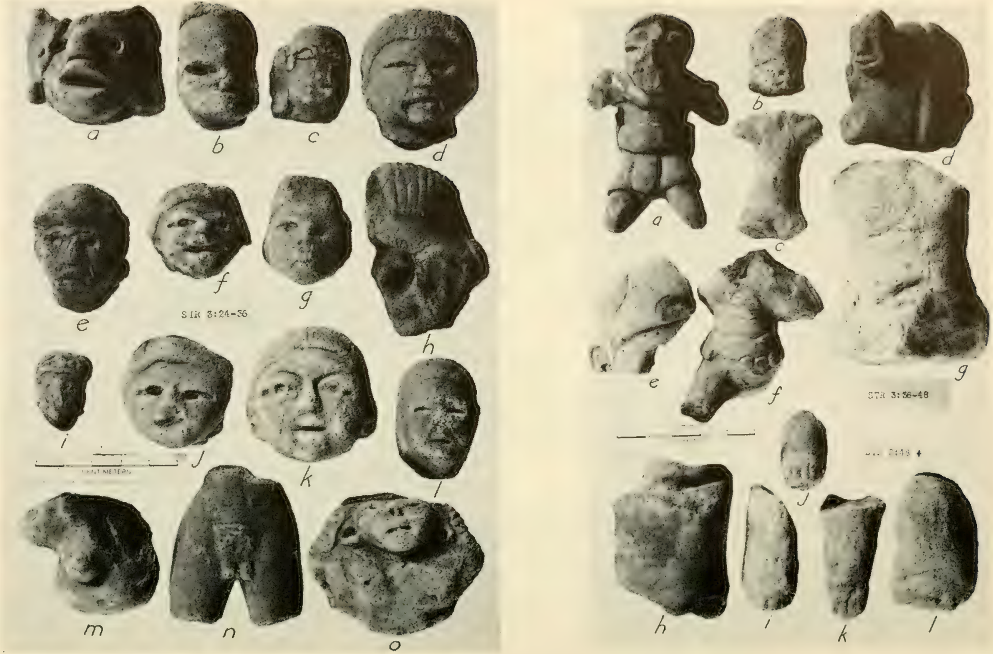
CENTIMETERS

Figurines, Stratitrench 3, Level 2. *a*, I–A–3. *b*, I–B–4. *c*, I–A–3. *d*, I–B–3b. *e*, I–B–3a/II. *f*, I–B–3b/II. *g*, I–B–4/II. *h*, I–B–4/II. *i*, Bird head (whistle ?), Style I. *j*, Animal head, Style I (?). *k*, I–B–4. *l*, I–B–2. *m*, Animal head fragment, Style I (?). *n*, Large human head fragment, probably I–B–3b. *o*, Torso, I–A or I–B. *p*, Crude seated animal (rear view, front very eroded) Style I. *q*, Torso, I–A or I–B.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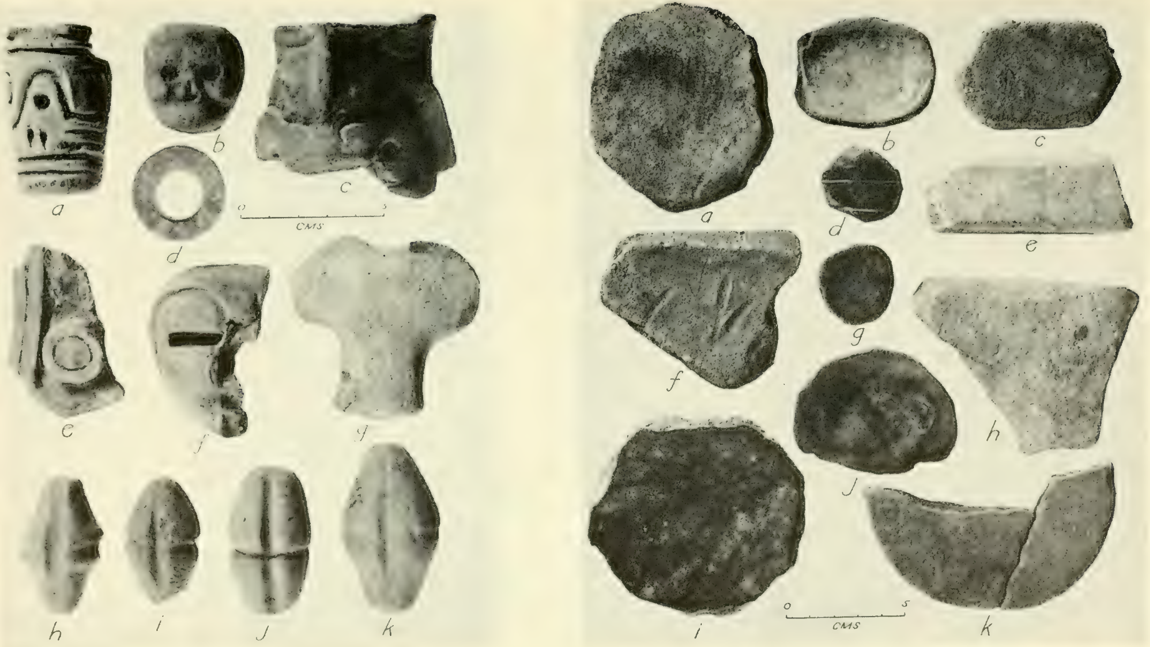
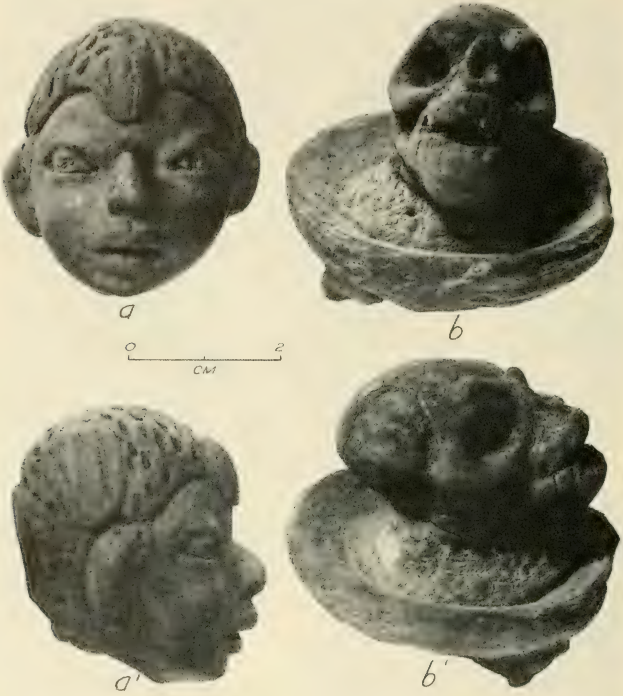
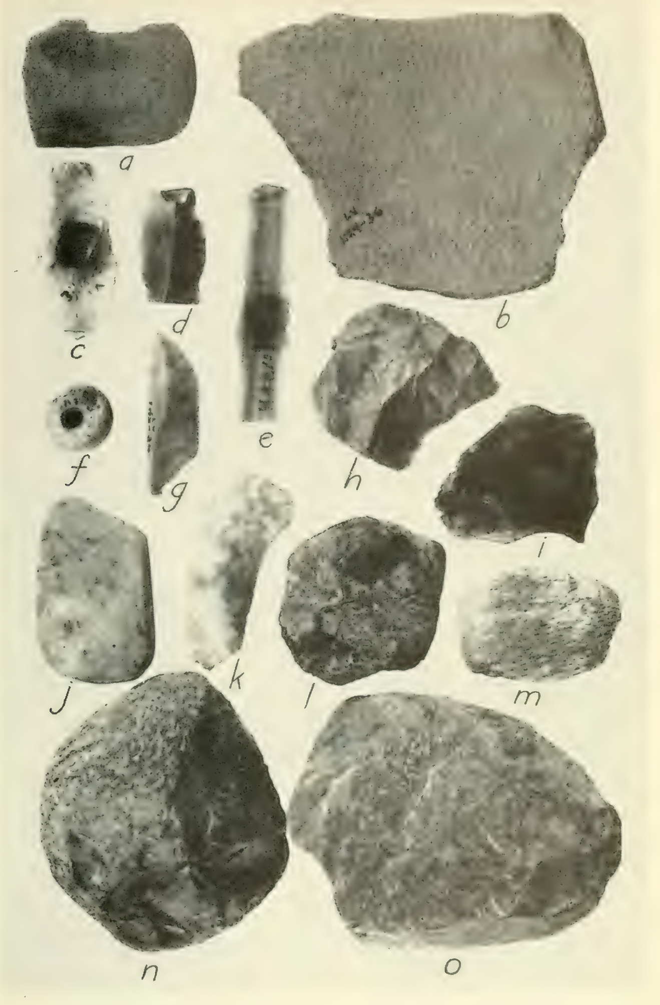
Figurines, Stratitrench 3, Levels 3, 4, and 5. *Left*, Level 3: *a*, I–C–1 modified (I–C–1/II?). *b*, I–A–3 aberrant (or I–C?). *c*, I–B–4/III (treatment of eyes shows influence of modeled types). *d*, I–B–3b. *e*, I–B–3a. *f*, I–B–3b. *g*, I–A–3?. *h*, Probably I–B–3b. *i*, I–B–3a/II. *j*, I–B–3a. *k*, I–B–3b. *l*, I–B–3b/II. *m*, I–A or I–B torso. *n*, I–A or I–B body fragment. *o*, I–A–3. *Right*, *a–g*, level 4. *h–l*, Level 5. *a*, Style I (I/II?) anthropomorphized jaguar. *b*, I–A–3. *c*, I–A or I–B body. *d*, I–A/II head with monstrous (aberrant) body. *e*, III–A–2. *f*, I–B body (with cape and kilt). *g*, I–A or I–B body of serpentine (for reconstruction see fig. 45) *h*, *i*, *j*, *k*, *l*, body and limb fragments.



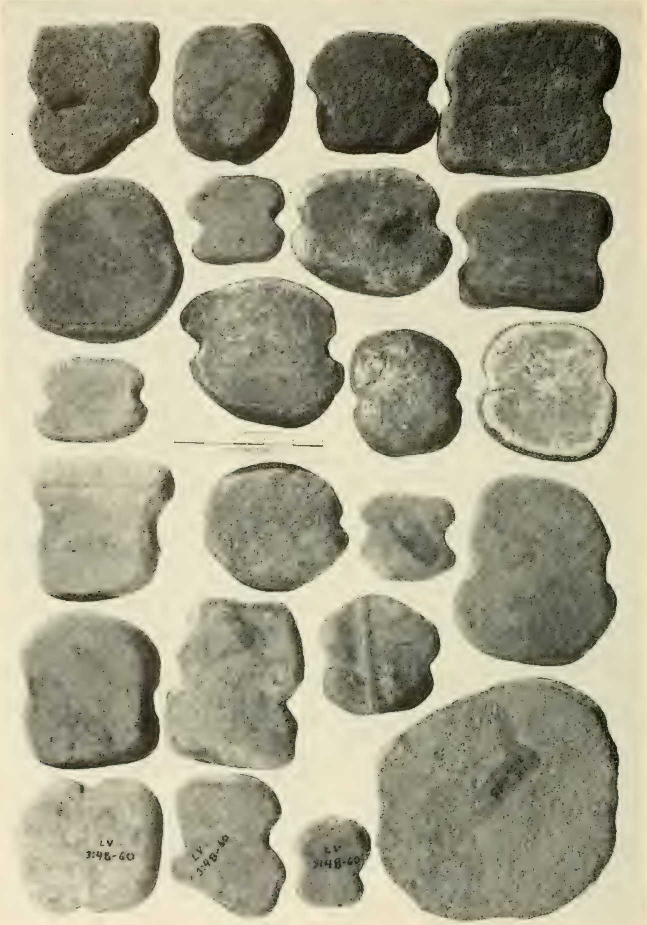
Left, Aberrant figurines and miscellaneous objects of clay from general digging. *a*, Cylindrical seal. *b*, Small skull, in Style II technique. *c*, Fragment of small effigy vessel representing a jaguar. *d*, Pottery earplug flare (?). *e*, *f*, Parts of aberrant figurine. *g*, Object of unknown use. *h–k*, Weights fashioned for suspension. *Right*, Various forms of reworked sherds. *a*, *i*, Roughed out disks. *b*, *d*, *g*, *j*, *k*, Disks with ground-off edges. *e*, *f*, *h*, Sherd "saws." All from Stratitrench 1, Level 4.



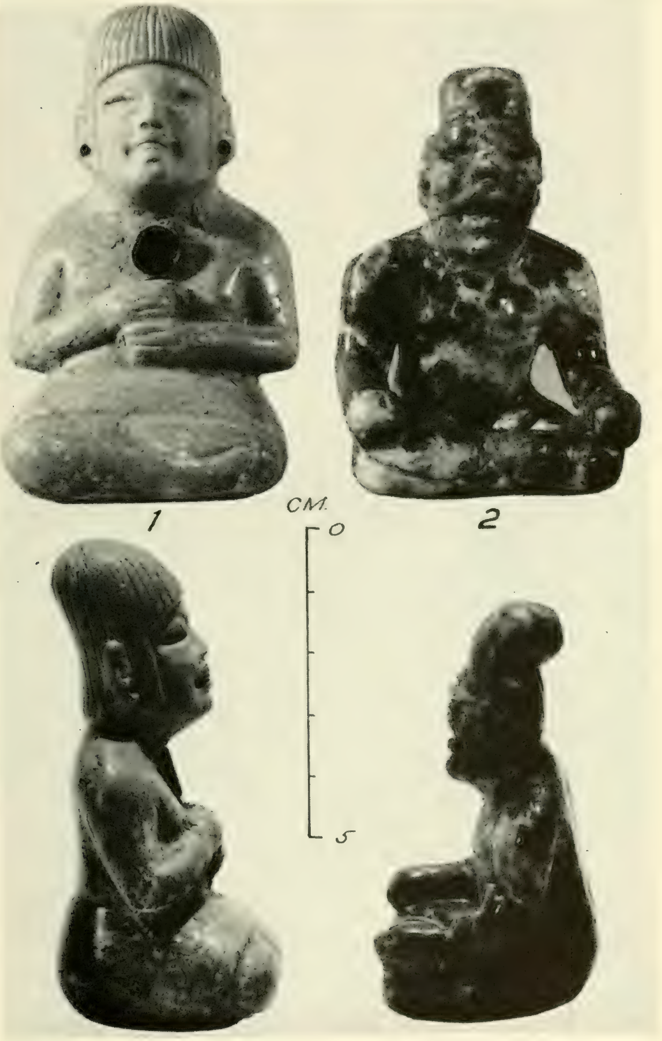
Aberrant figurines, strongly modeled (Style III). *a*, III–B, with Style I influence in use of punctations and appliqué. *b*, III–B. General digging. (*a′* and *b′* are profiles of *a* and *b*.)



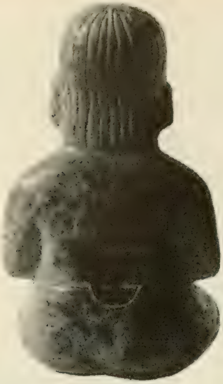
Objects of stone and other materials. *a*, Sandstone "saw" fragments. *b*, "Saw" (?) or grindstone of very dense sandstone (concretionlike). *c*, *d*, *e*, Obsidian flake knives (note dressed tips of *c* and *e*). *g*, *h*, *i*, Tools of chalcedony flakes. *f*, Hemispherical bead of greenish stone or poor quality jade. *j*, Small plaque (or pendant ?) of poor quality jade. *k*, Fragment of Type B earplug (strongly flared, with rectangular outline). *l*, Pellet of asphaltum, shaped into a flattish disk. *m*, Pumice polishing tool. *n*, *o*, Hammerstones (*n* is of chalcedony).


LV 3:48-60
LV 3:48-60
LV 3:48-60

Sample series of notched sherds (and disk, lower right-hand corner), from Stratitrench 3.



Jade figurines 1 and 2, from tomb in Mound A–2, front and side views.



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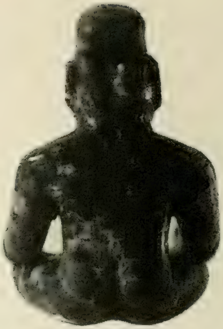

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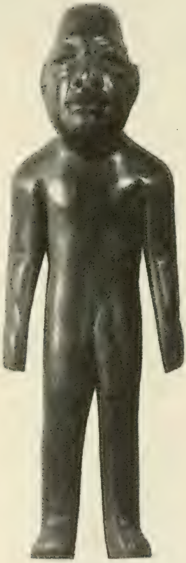

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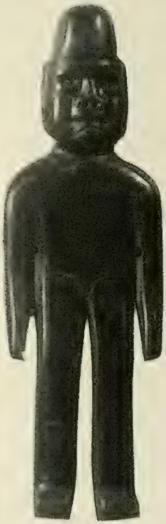
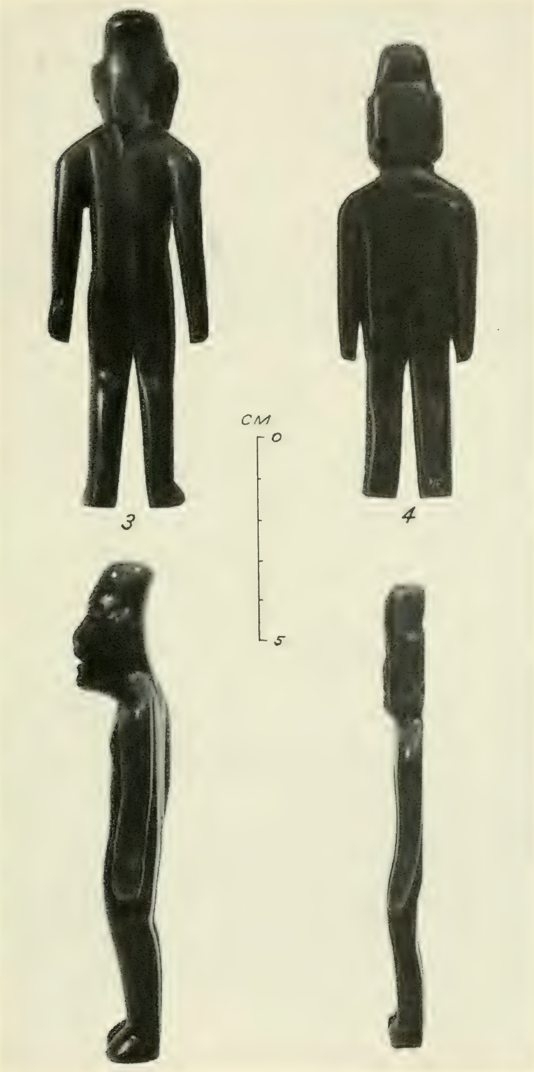
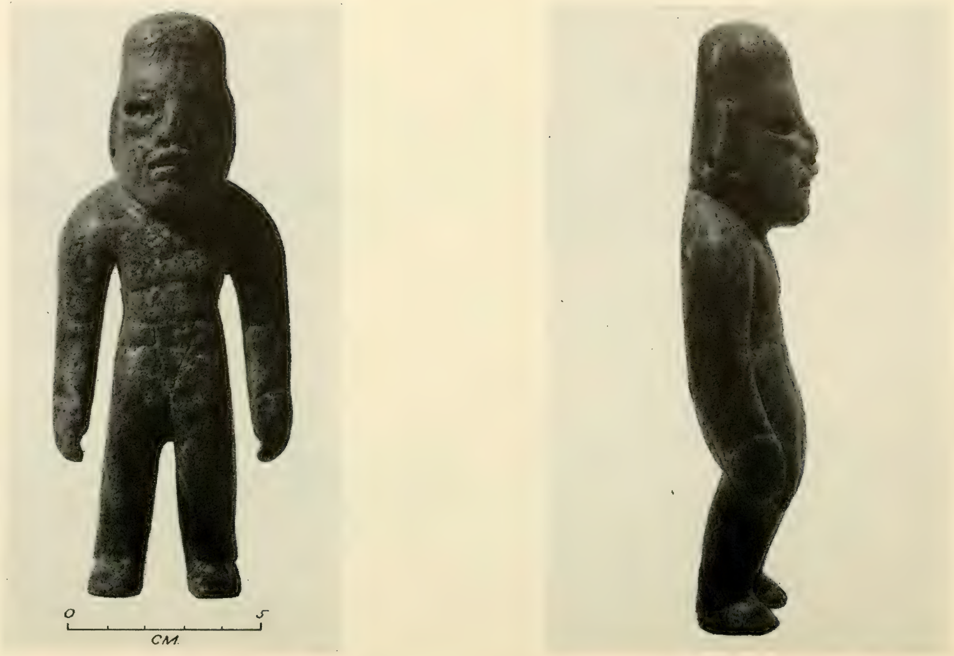


4

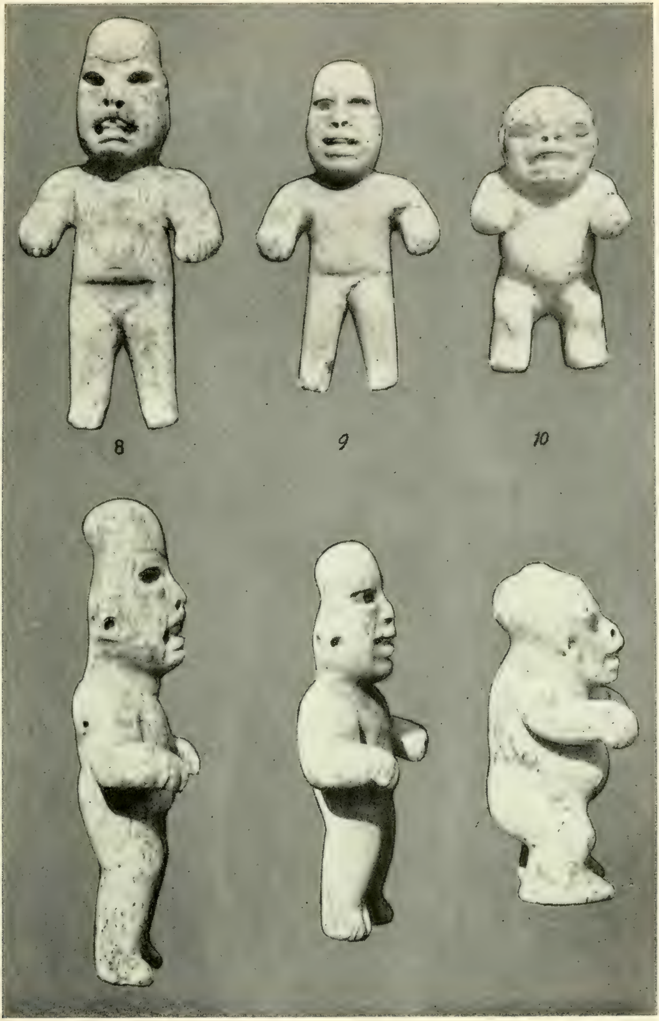
Dorsal views of Jade figurines 1 and 2, and front views of figurines 3 and 4, also from tomb in Mound A–2 (1 and 2 not same scale as preceding plate).



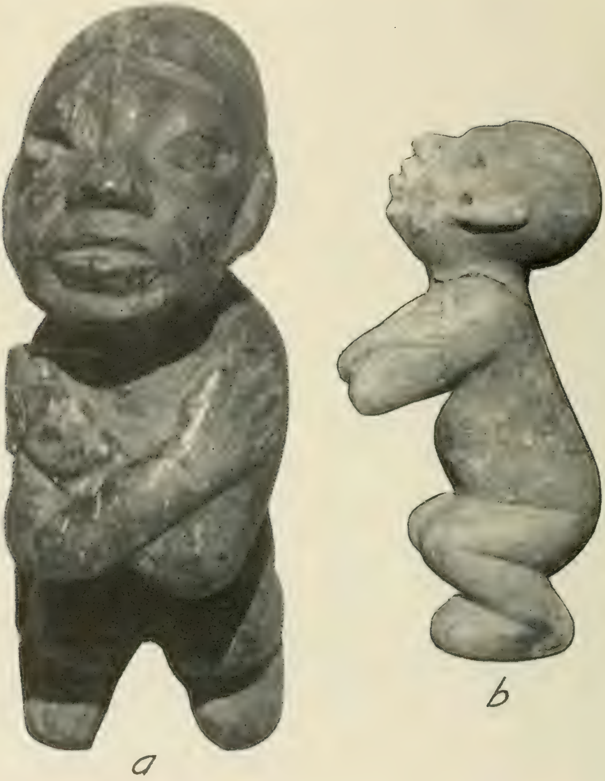
Dorsal and profile views of figurines 3 and 4.



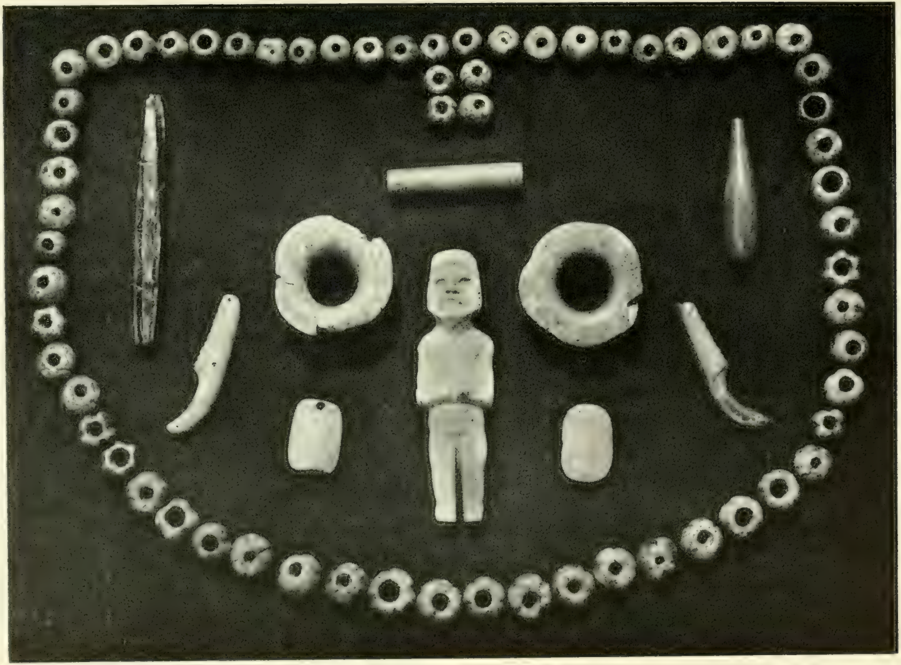
Figurine 5, of serpentine, from stone coffer (Monument 6). *Left,* Front view. *Right,* Profile view of figurine 5.



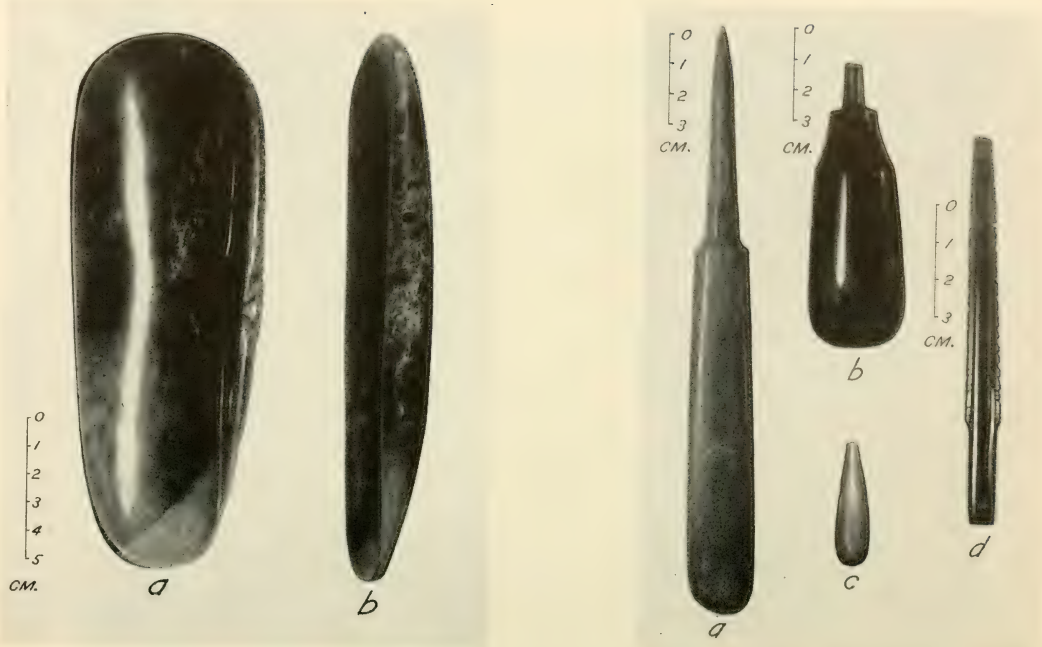
Figurines 8, 9, and 10, from 1943 collections. Figurine 10 is about 10 cm. tall. (National Geographic Society photo.)



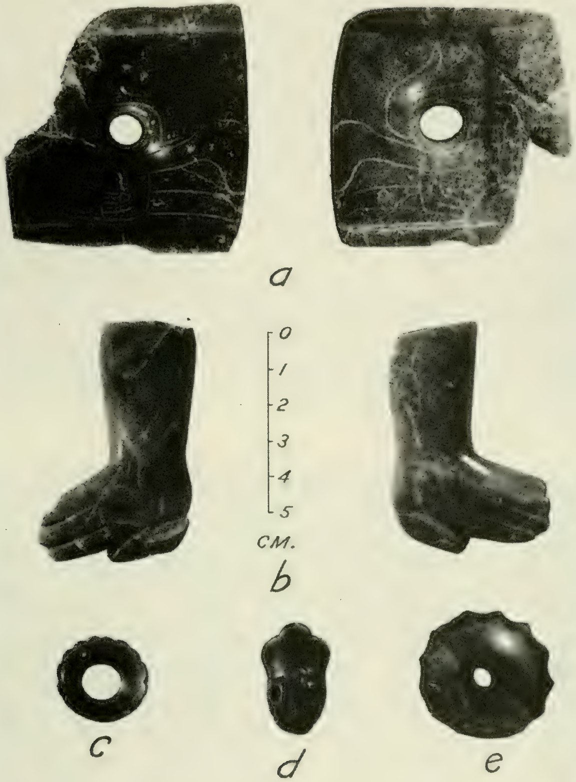
Figurine 11. *Left,* Facial detail. *Right,* Profile view of figurine 11 (height: about 11 cm.). (National Geographic Society photo.)



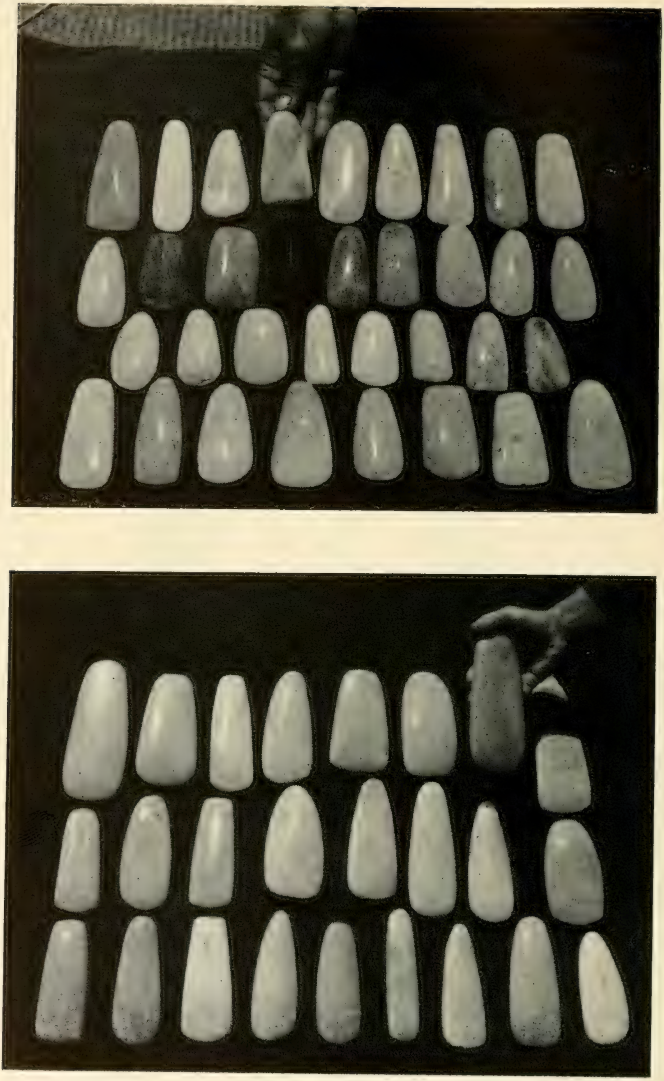
Offerings from Sandstone Cist, Mound A-3. Figurine 12, of serpentine (or limestone ?); decorated ear spools, incised obsidian core, etc. (National Geographic Society photo.)



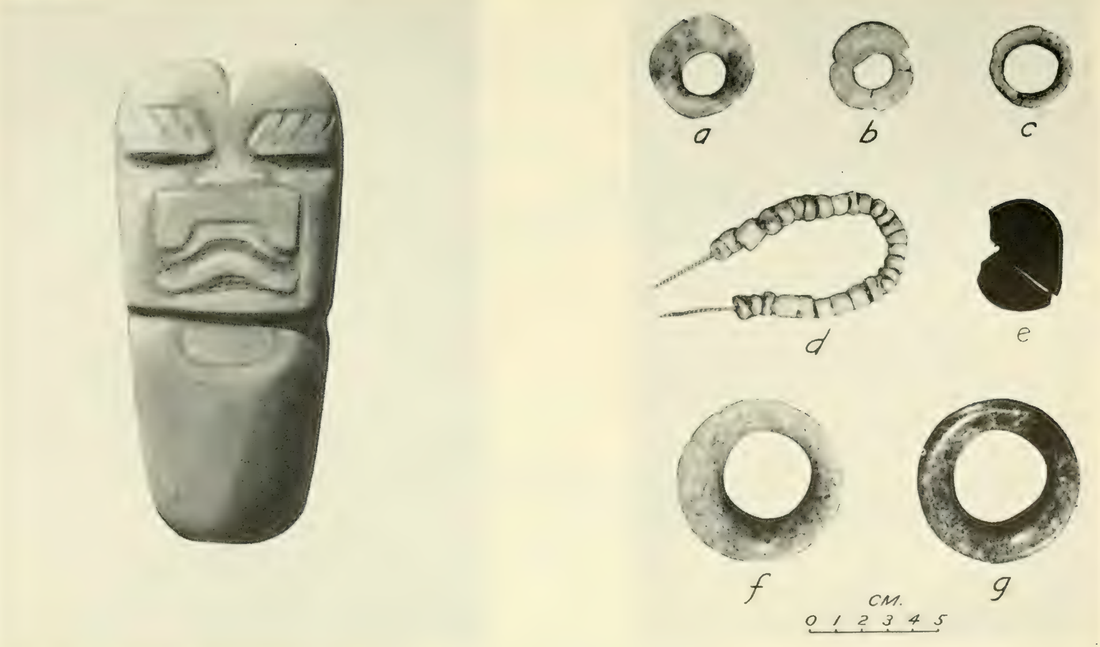
Left, Clamshell-shaped jade pendant, from tomb in Mound A–2. *a*, Concave "interior" surface. *b*, "Hinge" edge. "Hinge" edge, *b*, is to a scale very slightly larger than that of *a*. *Right*, Jade objects of unknown use. *a*, Sandstone Coffer (Monument 6). *b*, Tomb in Mound A–2. *c*, From Sandstone Coffer. *d*, Object in form of sting ray spine (pendant ?) from tomb, Mound A–2. Scale of specimens varies: those of *a*, *b*, *d* to left of each object; *c*, about 8 or 10 cm. long.



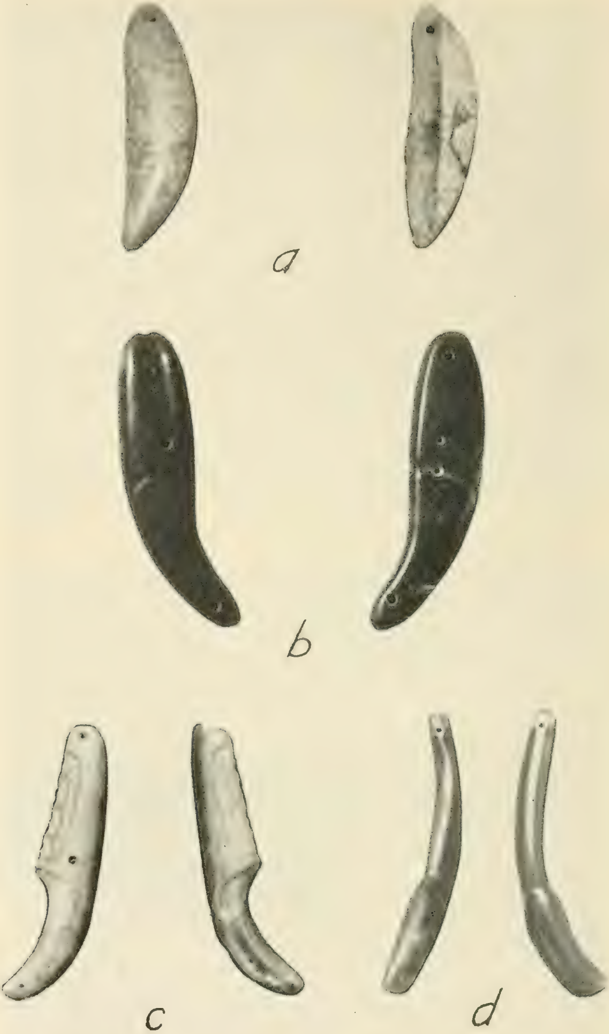
Jade objects of unknown use from the 1942 excavations. *a*, Rectangles with incised Bird-monster design. *b*, Hands and forearms (imperforate). *c*, *e*, Small flares. *d*, Small object suggesting animal head (pendant ?). Scale of *c–e* differs from *a* and *b*; *c* is about 25 mm. in diameter. (It has been photographed at a slight angle; it is actually circular, not elliptical.) *d* has an over-all length of about 29 mm. *e* has a diameter of about 21 mm.



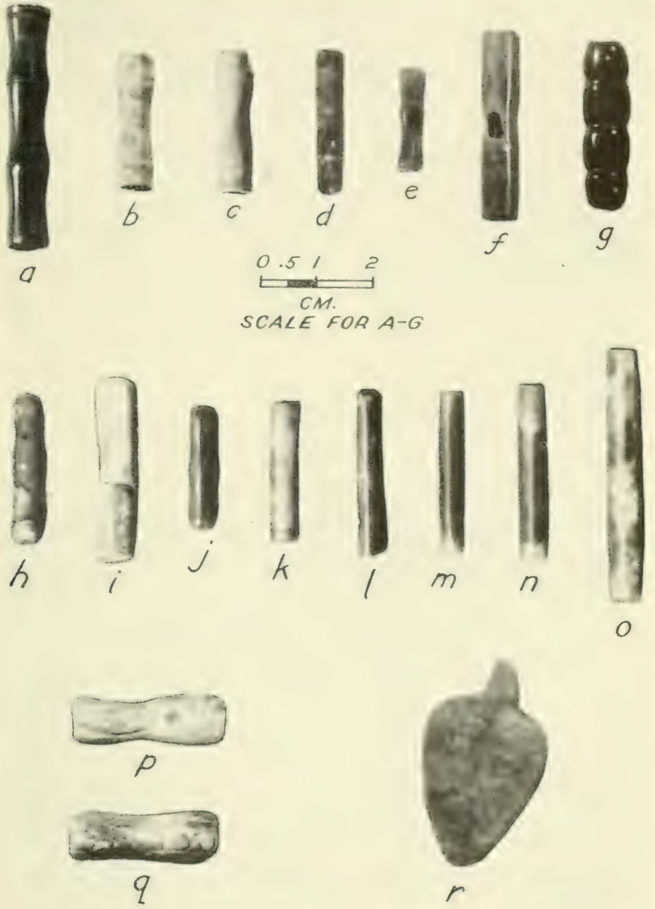
Series of jade celts from offering, Tomb E (1943 season.) *Upper*, Side view. *Lower*, Additional jade celts from offering (1943 season.) (National Geographic Society photos.)



Left, Jade celt carved with Jaguar-monster design from offering, "Tomb" E. *Right*, Jade and obsidian objects from Sandstone Cist, Mound A–3 and Monument 6. *a*, *b*, *c*, Earplugs of crystalline jade of rather poor quality, from mound mass of A–2. *d*, Subspherical disk and short cylindrical beads of crystalline poor quality jade, also from mound mass. *e*, Small obsidian plaque (pendant ?) from tomb in A-2. *f*, *g*, Earplugs from offering in Sandstone Coffer (Monument 6).



Jade bobs or pendants associated with earplugs. *a*, From offering containing four figurines, etc.; *b*, from Sandstone Coffer; *c*, from offering including decorated earplugs; *d*, from offering of "Tomb D." Not to same scale; pair *a* about 5.8 cm. long; pair *b* about 4 cm. long.


a
b
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d
e
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g
0 .5 1 2
CM.
SCALE FOR A-G
h
i
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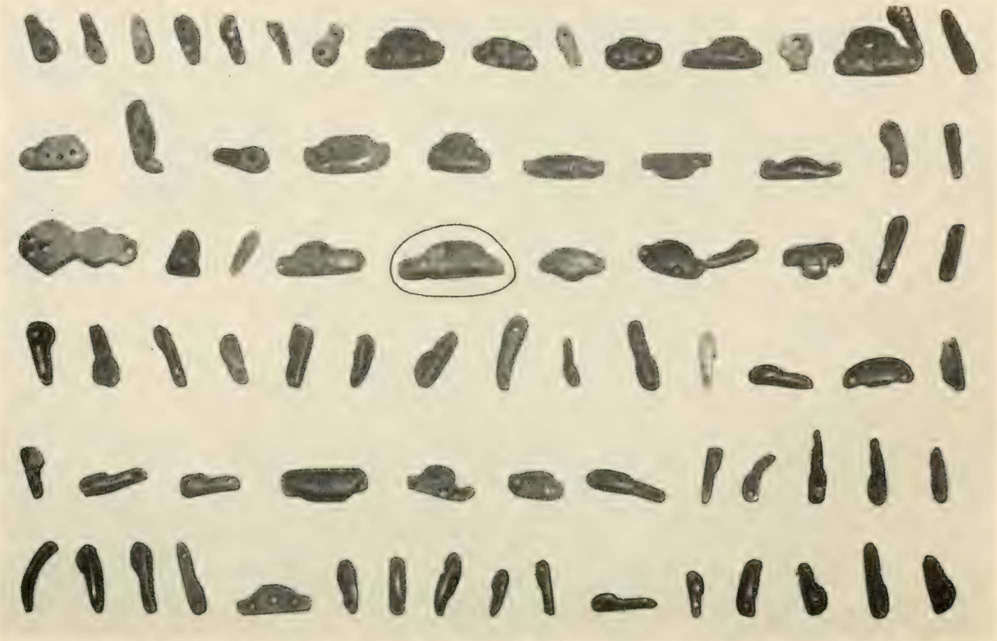
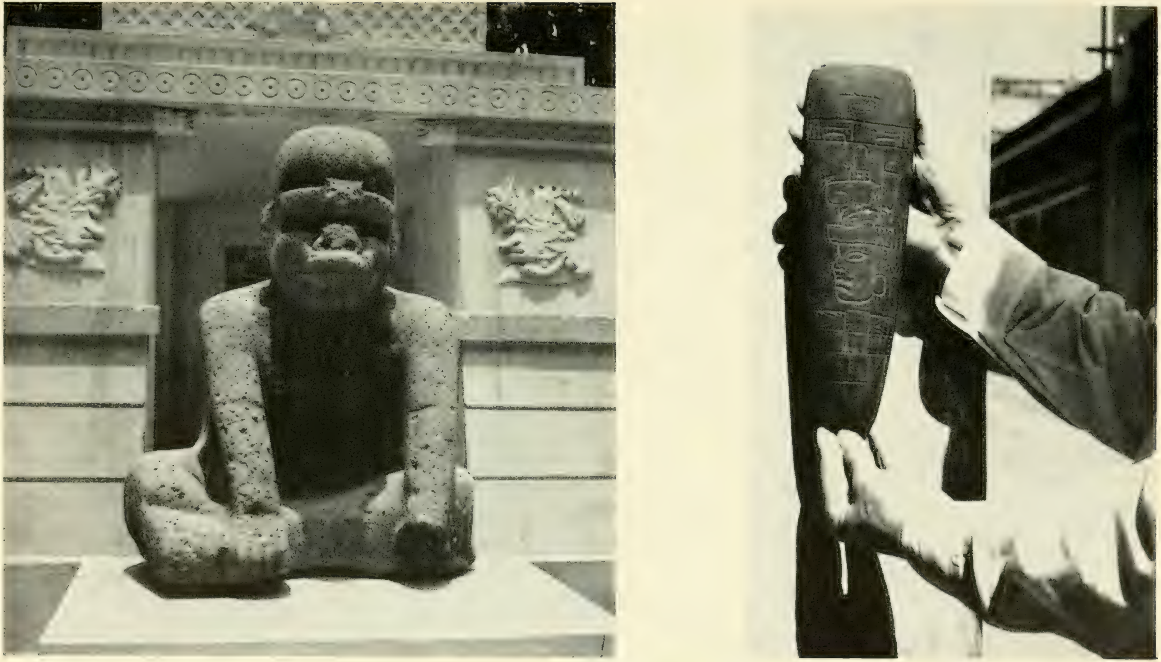
o
p
q
r

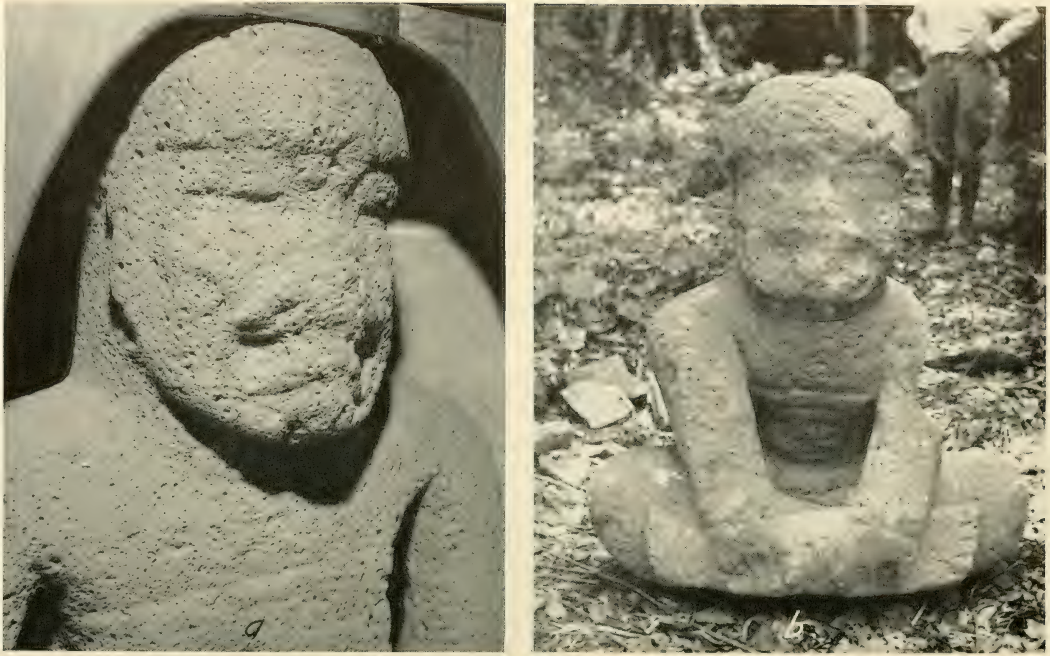
Various types of tubular jade beads (*a–q*), and heart-shaped object of jade (*r*). Figs. *a–g*, and *r*, from 1942 excavations, remainder from 1943. Scales of different sections of plate vary: *a–g*, as shown; in *h–o*, *o* is about 4.6 cm. long; in *p–q*, *p* is about 19 mm. long; *r* is about 2.3 cm. maximum length.



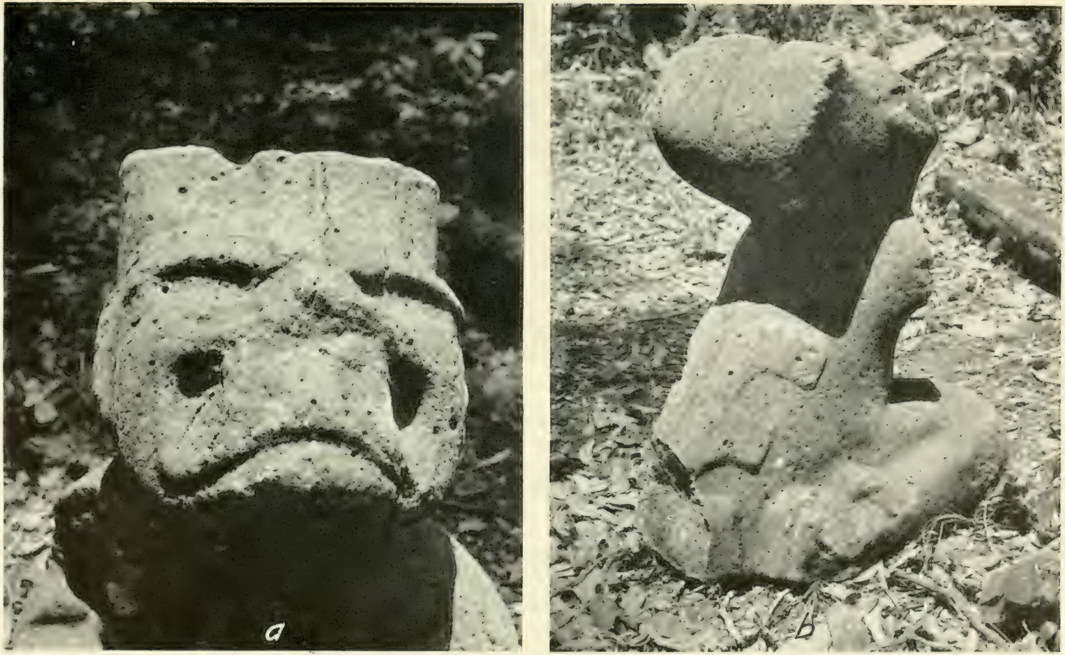
Part of series of jade spangles, found with limestone (?) figurine, decorated earplugs, etc. (About 30 specimens inadvertently cut off in photographing, along with scale). Circled specimen, photographed with scale by Wedel, has a maximum length of 20.5 mm.



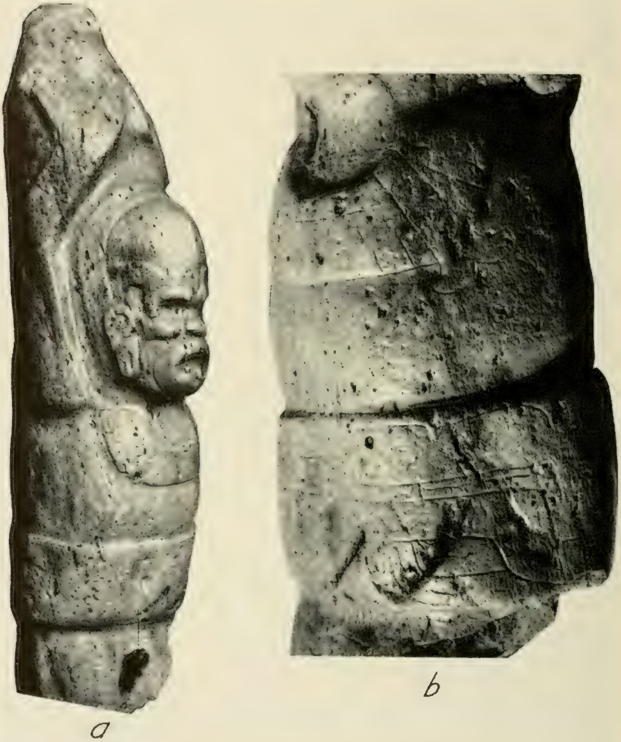
Left, Monument 8, believed to have been transported in recent times from La Venta to present location in Villahermosa, Tabasco. *Right*, Celt of dark stone, from vicinity of Simojovel, Chiapas. (National Geographic Society photos.)



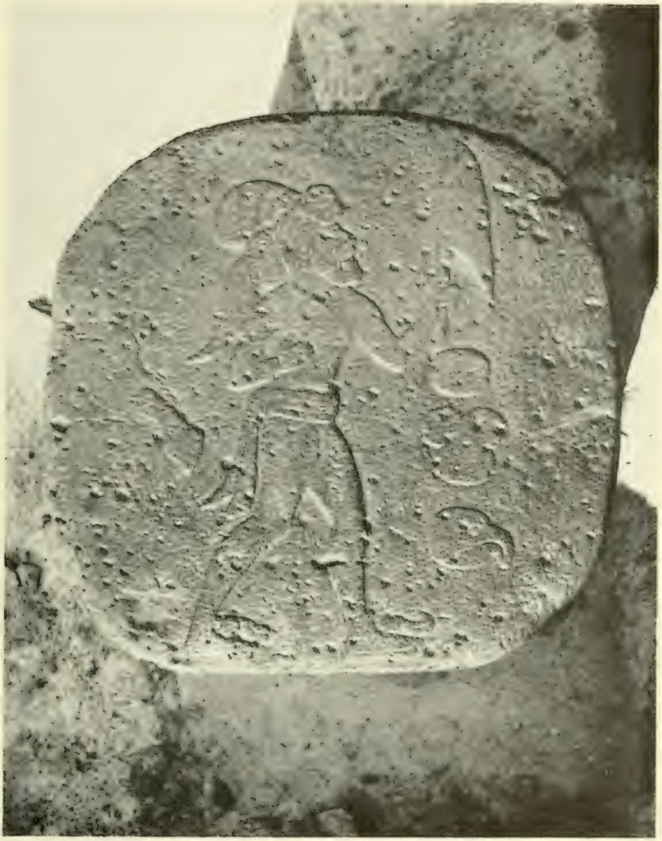
Left, Monument 9, facial detail. *Right*, Monument 10. Monument 9 is at Comalcalco, Tab., 10 at Finca San Vicente, Tab. Both are believed to have been moved from La Venta by mahogany loggers.



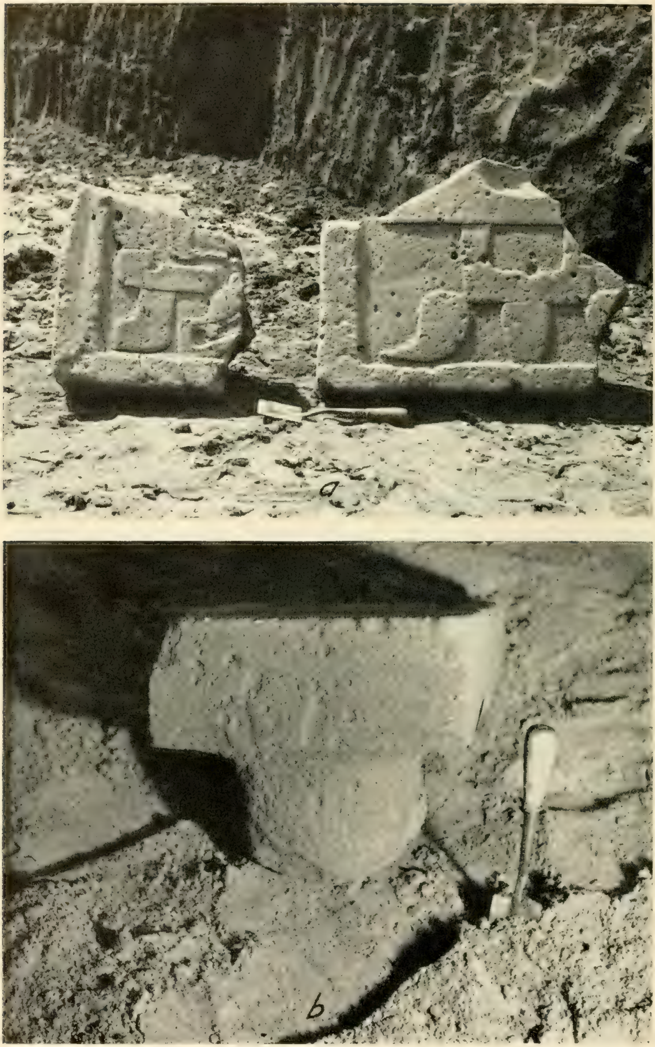
Monument 11. Finca San Vicente. *Left*, detail of face. *Right*, view of side and rear.



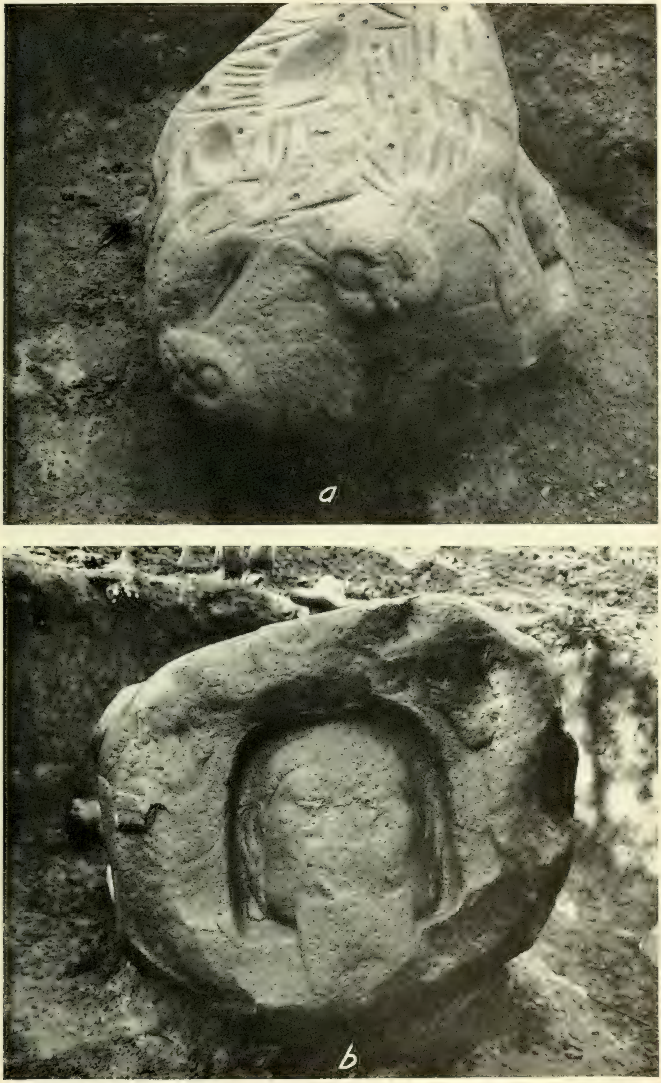
Monument 12. Carving representing a monkey, from Profile Trench in A-1 (1943 excavations). See pl. 5, *c*, and fig. 53.



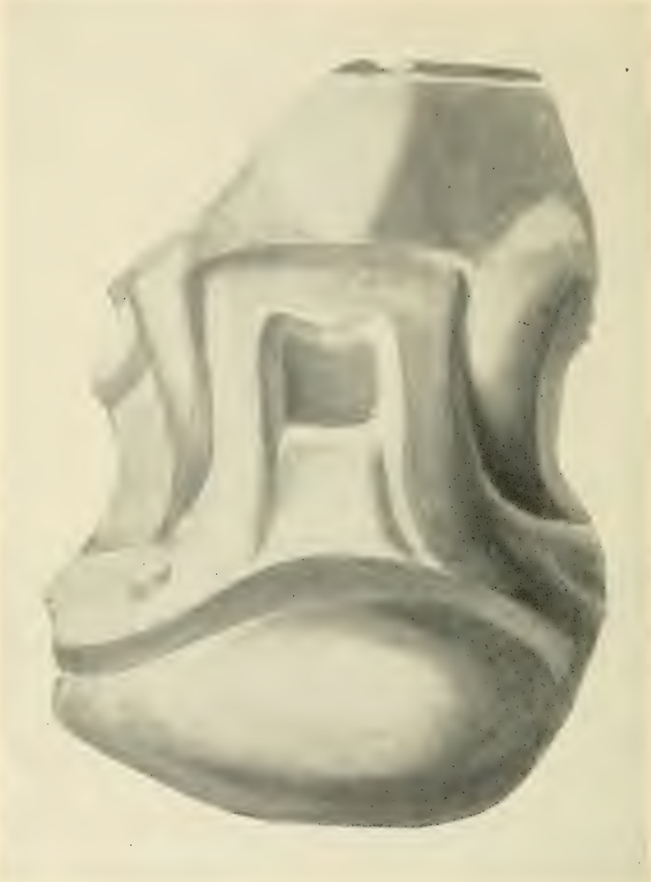
Monument 13. From 1943 excavations in A–2. Low relief carving and possible glyphs.



Monument 15. Fragments, presumably from same monument, with portions of Jaguar-monster mask(s). See fig. 54 for suggested reconstruction.



Altar 7, found 1943. See p. 184.



Wash drawing of fragment of stone mask representing the Jaguar-monster, from base of Middle Tres Zapotes deposit (Trench 13, Tres Zapotes). (Drawing by Edwin G. Cassedy.)

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